

9015-012

NORTH GAWBER LANDSCAPE SPECIFICATION

Full Specification

22/06/2015 - 14:55

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Earthworks excavating system

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10-35-35/125 Earthworks excavating system

System outline

10-35-35/125 Earthworks excavating system

- **System performance:** Ground preparation in soft landscape areas.
- **Execution:** 10-35-35/616 Removal of excavated topsoil;
10-35-35/668 Variations in ground water level;
10-35-35/666 Excavations which encounter springs or running water;
10-35-35/602 Site clearance generally;
10-35-35/662 Treatment of underground structures in landscape areas;
10-35-35/620 Treatment of excavated subsoil;
10-35-35/630 Tolerances for excavated surfaces;
and .

Execution

10-35-35/602 Site clearance generally

- **General:** Clear site of rubbish, debris and vegetation. Do not compact topsoil.
- **Timing:** Before topsoil stripping, if any.
- **Removal of non-organic matter:**
 - **Remove stones with any dimension exceeding:** 100 mm.
 - **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- **Application of herbicide:**
 - **Type of herbicide:** Non-residual.
 - **Point of application:** To areas to receive planting.
- **Arisings:**
 - **Arising materials:** Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings, and other undesirable matter.
 - **Required actions:** Remove from site.

10-35-35/616 Removal of excavated topsoil

- **Required actions:** Remove surplus topsoil from site.

10-35-35/620 Treatment of excavated subsoil

- **Treatment:** Apply translocated non-residual herbicide.
- **Timing:** At least two weeks before excavating subsoil.

10-35-35/630 Tolerances for excavated surfaces

- **Permissible deviations from linear dimensions generally.:** Submit proposals.
- **Tolerances on inclination of slope surface:** $\pm 2^\circ$.
- **Permitted localized deviations from slope surface:** ± 10 mm.

10-35-35/662 Treatment of underground structures in landscape areas

- **Walls, roads, foundations, disused services, drains, manholes etc:** Break out.
- **Excavation dimensions:**
 - **Depth below finished levels (minimum):**
 - Grass, ground cover and perennial planting:** 500 mm.
 - Shrub planting:** 750 mm.
 - Within 2 m of tree planting:** 1000 mm.
- **Walls and slabs remaining:** In every 10 m² of wall or slab, make a drainage hole at least 600 mm diameter.

10-35-35/666 Excavations which encounter springs or running water

- **Springs and running water:** Give notice immediately if encountered and Submit proposals for diversion.

10-35-35/668 Variations in ground water level

- **Levels encountered that are significantly different from levels in the site investigation report or previously measured:** Inform the Contract Administrator as soon as different levels are encountered.

Ω End of system

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Earthworks filling system

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10-35-35/127 Earthworks filling system

System outline

10-35-35/127 Earthworks filling system

- **System performance:** SUBSOIL FILL LAYER FOR PLANTING AREAS
- **Fill materials:** Subsoil in compliance with BS8601:2013. Textural classification: min 60% sand content. OR medium-coarse graded washed sand.
- **Samples required:** 10-35-35/305 Product samples.
- **Execution:** 10-35-35/706 Loose tip filling for landscape areas and 10-35-35/690 Placing fill.

Products

10-35-35/305 Product samples

Shared by: 10-35-35/127 Earthworks filling system; and 10-35-35/185 Topsoil filling system.

- **Manufacturer:** Submit proposals.
- **Supplied by:** Submit proposals.
- **Purpose:** For use as reference sample
- **Labelling:** Clearly label all submitted samples.
- **Topsoil:**
 - **Sample load:**
Mass (minimum): 5 kg.
 - **Reference samples:** Retain for comparison with subsequent loads.
- **Timing:** Before ordering for project

Execution

10-35-35/690 Placing fill

- **Condition of surfaces of excavations and areas to be filled:** Decompact base of excavation to clause 10-35-35/724 . Ensure excavation is free from, rubbish and standing water.
- **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
- **Placing fill against adjacent structures, on membranes and near buried services:** Do not overload, destabilize or damage. Allow 14 days (minimum) before backfilling against in situ concrete structures.
- **Placing fill behind retaining walls:** Generally compact in layers maximum 200 mm deep.
- **Layers:** Place so that only one type of material occurs in each layer.

10-35-35/706 Loose tip filling for landscape areas

- **Extent of loose tip filling for landscape areas:** Show the location and extent of filling on location drawings.

- **Filling:** Place fill in layers not more than 200 mm thick. Lightly compact each layer to produce a stable finished base for topsoiling.

Ω End of system

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Topsoil filling system

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10-35-35/185 Topsoil filling system

System outline

10-35-35/185 Topsoil filling system

- **System performance:** Undertaking planting and seeding/turfing operation will be taken as acceptance by the Main Contractor and Landscape Subcontractor of topsoil suitability and Comply with BS3882:2007. Soils to support the healthy establishment of all proposed planting types specified.
- **Fill materials:** 45-40-85/325 Imported topsoil to BS 3882 and additional specified parameters .
- **Samples required:** 10-35-35/305 Product samples.
- **Execution:** 10-35-35/606 Topsoil analysis;
10-35-35/724 Spreading topsoil generally;
and 10-35-35/726 Loose tipping of topsoil.

Products

10-35-35/305 Product samples

Shared by: 10-35-35/127 Earthworks filling system; and 10-35-35/185 Topsoil filling system.

- **Manufacturer:** Submit proposals.
- **Supplied by:** Submit proposals.
- **Purpose:** For use as reference sample
- **Labelling:** Clearly label all submitted samples.
- **Topsoil:**
 - **Sample load:**
Mass (minimum): 5 kg.
 - **Reference samples:** Retain for comparison with subsequent loads.
- **Timing:** Before ordering for project

45-40-85/325 Imported topsoil to BS 3882

Shared by: 10-35-35/185 Topsoil filling system; 10-35-35/606 Topsoil analysis; and 40-35-35/185 Turf planting system.

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** To BS 3882.
- **Classification:** Unless otherwise specified all 'topsoil' for planting, turfing or seeding shall comply with the general requirements of BS3882:2007, Grade - Multipurpose. However the following additional constraints apply: pH Value: 5.5-7.5.
- **Particle grade:** Textural classification: 'Loam soils' are acceptable within the following parameters: Silt = 0-65% / Sand = 30-70% / Clay = 5-30%.

Execution

10-35-35/606 Topsoil analysis

- **Soil to be analysed:** 45-40-85/325 Imported topsoil to BS 3882.
- **Soil analyst:** IPSS registered soil scientist.
- **Samples:** Collect in accordance with BS 3882.
- **Tests:** Nutrient content;
pH value;
Textural classification;
and Phytotoxic and CLEA elements.
- **Submit:** Report detailing results and analyst's recommendations with reference to the proposed soft landscape design.

10-35-35/724 Spreading topsoil generally

Shared by: 10-35-35/185 Topsoil filling system; and 10-35-35/726 Loose tipping of topsoil.

- **Method:** Contractor's choice.
- **Locations for spreading topsoil:** Any areas where topsoil is required for new planting.
- **Preparatory works:**
 - **Levelling and grading:** Excavate and/ or place fill to required profiles and levels. Grade to smooth flowing contours to achieve specified finished levels of topsoil. Avoid overcompaction.
 - **Loosening:**
 - Light and non-cohesive subsoils:** When ground conditions are reasonably dry, loosen subgrade thoroughly to a depth of 300 mm.
 - Stiff clay and cohesive subsoils:** When ground conditions are reasonably dry, loosen subgrade thoroughly to a depth of 450 mm.
 - Rock and chalk subgrades:** Lightly scarify subgrade to promote free drainage.
 - **Removing stones:**
 - Timing:** Immediately before spreading topsoil and/or filling with approved landscape fill.
 - Size in any dimension (maximum):** 50 mm.
 - **Arisings, contaminants and debris:** Remove from site.
 - **Inspecting formations:** Notify.
- **Temporary roads and surfacing:** Remove before spreading topsoil.
- **Layers:**
 - **Depth (maximum):** 150 mm for ornamental planting and amenity grass areas.
 - **Firming:** Gently firm each layer before spreading the next.
- **Depths after firming and settlement (minimum):** Grassed areas - 150 mm ;
Ornamental planting - 400 mm.
Tree pits - 400mm
- **Crumb structure:** Do not compact topsoil. Preserve a friable texture of separate visible crumbs.
- **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.
- **Notice before spreading topsoil:**
 - **Period of notice (minimum):** Seven days.

Ω End of system

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General pattern strained wire fencing system

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25-20-30/129 General pattern strained wire fencing system

System outline

25-20-30/129 General pattern strained wire fencing system

- **System performance:** 25-20-30/270 Wildlife, plant and animal management.
- **System manufacturer:** Contractor's choice.
- **Standard:** To BS 1722-2.
- **Designation:** SW90.
- **Posts:** 45-25-62/375 Softwood.
- **Post foundations:** Contractor's design.
- **Wire:** Contractor's design.
- **Execution:** 25-20-30/603 Fencing work on or adjacent to highways;
25-20-30/605 Alignment of fences;
25-20-30/607 Fencing work generally;
25-20-30/651 Formation of holes for cast-in fence posts for general pattern strained wire fencing systems;
25-20-30/652 Driven post settings for general pattern strained wire fencing systems;
25-20-30/654 Erecting general pattern strained wire fencing systems;
and 25-20-30/729 Attaching wire to timber posts.
- **System completion:** 25-20-30/870 Inspection of fencing systems.

System performance

25-20-30/270 Wildlife, plant and animal management

- **Standards:** To BS 1722-2.
- **Functional requirements:**
 - **Plant support:** Temporary during the establishment of new hedgerow planting

Products

45-25-62/375 Softwood posts

- **Manufacturer:** Contractor's choice.
- **Standards:** To BS 1722-2.
- **Posts:**
 - **Section:** Round.
- **Finish as delivered:**
 - **Worked finish:** Planed.

Execution

25-20-30/603 Fencing work on or adjacent to highways

- **Requirement:** Comply with the Department for Transport's Safety at street works and road works - a code of practice. Retain a copy of this document on site during the course of the works.

25-20-30/605 Alignment of fences

- **Alignment of fences and barriers:** Straight lines or smoothly flowing curves, following profile of the ground.
- **Tops of posts:** Follow ground profile.
- **Verticality:** Plumb.
- **Tolerances:** ± 30 mm of prescribed alignment and, within any 10 m length, ± 15 mm from the straight or required radius.
- **Changes of direction:** Obtuse angles such that no angle is less than 130° .

25-20-30/607 Fencing work generally

- **Metal fixings:** Protect from corrosion.
- **Site cutting of wood:**
 - **Components generally:** Minimize cutting.
 - **Wood below or near ground level:** Do not cut.
 - **Treatment of surfaces exposed by minor cutting and drilling:**
 - Method:** Apply sufficient material to provide a coating equal to the original preservative.
 - Number of coats:** One.
- **Disposal of arisings:**
 - **Biodegradable arisings:** Remove to recycling facility.
 - **Tree roots and stumps:** Remove from site.
 - **Litter and nonbiodegradable arisings:** Remove from site.

25-20-30/651 Formation of holes for cast-in fence posts for general pattern strained wire fencing systems

- **Standard:** To BS 1722-2.
- **Straining post settings:**
 - **Hole plan dimensions:** Contractor's choice.
 - **Hole depth (minimum):** Contractor's choice.
 - **Concrete fill depth (minimum):** Two thirds depth.
- **Strut settings:**
 - **Hole plan dimensions:** 300 x 450 mm.
 - **Hole depth (minimum):** 450 mm.
 - **Concrete fill depth (minimum):** Half depth.

25-20-30/652 Driven post settings for general pattern strained wire fencing systems

- **Standard:** To BS 1722-2.
- **Intermediate post settings:**
 - **Driven depth (minimum):** Contractor's choice.

25-20-30/654 Erecting general pattern strained wire fencing systems

- **Standard:** To BS 1722-2.
- **Fence height:** 900 mm.
- **Horizontal wires:**
 - **Number:** Three.
 - **Spacing:** 330, 330.
- **Post centres (maximum):**
 - **Straining posts:** Submit proposals. At each change of direction as necessary to follow proposed alignment +/- 200mm from centreline of hedge.
 - **Intermediate posts:** Min 2.5m
- **Fasteners and fittings:** Contractor's choice.

25-20-30/729 Attaching wire to timber posts

- **Standard:** To BS 1722-2.
- **Attaching line wires to posts:**
 - **Top wire:** Top wire to be secured approximately 75 mm below top of post.
 - **Jointing method:** Line wires to be joined at mid-span.
 - **Straining posts:**
 - Generally:** Strain each line wire tightly and secure to each straining post. Strain at a point between the straining posts.
 - Round timber:** Winding brackets attached to post with fixing bolts.
 - **Intermediate posts:** Single staple driven to a running fit.

System completion

25-20-30/870 Inspection of fencing systems

- **Timing:** Two weeks after request by contract administrator.
- **Period of notice (minimum):** Three working days.

Ω End of system

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Grass-planted bulb and wildflower system

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40-35-00/135 Grass-planted bulb and wildflower system

System outline

40-35-00/135 Grass-planted bulb and wildflower system

- **System performance:** 40-35-00/220 Aesthetic performance of amenity planting systems and .
- **Plants:** 45-40-10/311 Bulbs, corms and tubers.
- **Execution:** 40-35-00/610 Water restrictions;
and 40-35-00/631 Random setting out of amenity planting.
- **System completion:** 40-35-00/801 Operations immediately after planting;
40-35-00/802 Establishment of new planting;
40-35-00/806 Watering new planting;
and 40-35-00/810 type A Instructions for future maintenance type A.

System performance

40-35-00/220 Aesthetic performance of amenity planting systems

- **Design criteria:**
 - **Size:** Percentage cover of planted areas.
 - **Visual:** Seasonal change.

Products

45-40-05/343 Selective herbicides

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; and 40-35-35/190 Amenity grass maintenance system.

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001 and Pesticide Safety Directorate.
- **Target weeds:** Perennial weeds;
Perennial weeds in grassed areas;
and Grass weeds in lawns.
- **Active ingredient(s):** Manufacturer's standard.
- **Carrier:** Water.
- **Pack size (minimum):** Manufacturer's standard.
- **Additional active ingredients:** Manufacturer's standard.
- **Execution:** 45-40-05/601 Application of selective herbicides.

45-40-10/311 Bulbs, corms and tubers

- **General requirements:** 45-40-10/301 Nursery stock generally.
- **Supplier:** Contractor's choice.
- **Standards:** In accordance with the National plant specification.
- **Botanical name:** Refer to contract drawing

- **Grade:** Refer to contract drawing
- **Condition:** Firm and visibly free of pests and diseases.
- **Origin and provenance:** Contractor's choice.
- **Execution:** 45-40-10/603 Handling bulbs, corms, tubers and roots;
45-40-10/605 Times of year for planting;
and 45-40-10/607 Planting bulbs, corms, tubers and roots.

Execution

40-35-00/610 Water restrictions

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

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

40-35-00/631 Random setting out of amenity planting

- **Layout:** Plant bulbs in naturalised groups in areas located on the contract drawing.
- **Planting density:** As Plant schedule.

45-40-05/601 Application of selective herbicides

- **Target weeds:** All weeds.
- **Application rate:** Contractor's choice.
- **Timing and frequency:** Contractor's choice.
- **Areas not to be sprayed:** Bulb and corm planted areas when in leaf.
- **Disposal of arisings:**
 - **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.
 - **Operations:** Remove to contractor's tip.

45-40-10/603 Handling bulbs, corms, tubers and roots

- **Standard:** In accordance with HTA 'Handling and establishing landscape plants'.
- **Handling:** Remove from packaging immediately.
- **Storage on site:**
 - **Location:** Well ventilated, dark, covered, rodent proof container. Locate away from exhausts and fruit.
 - **Duration:** Minimum period. Permitted only when necessary.
 - **Temperature:** 18–21°C.

45-40-10/605 Times of year for planting

- **Dried herbaceous bulbs, corms and tubers:** September/ October.
- **Colchicum (crocus):** July/ August.
- **Green herbaceous bulbs:** After flowering in spring.

45-40-10/607 Planting bulbs, corms, tubers and roots

- **Depth of top of bulb, corm and tuber:** Approximately twice its height. Place base in contact with bottom of hole.
- **Backfilling:** Finely broken soil. Lightly firm to existing ground level.

System completion

40-35-00/810 Instructions for future maintenance type A

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; and 40-35-00/170 Pit-planted semi-mature tree system.

- **Recommended procedures for maintenance of planting work for one year:**
 - **Format:** Printed.
 - **Timing:** Before end of maintenance period.
 - **Content:** Schedule of ongoing maintenance problems experienced during the rectification period.

Ω End of system

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Pit-planted semi-mature tree system

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40-35-00/170 Pit-planted semi-mature tree system

System outline

40-35-00/170 Pit-planted semi-mature tree system

- **Trees:** 45-40-90/345 Container grown trees.
- **Tree pit:**
 - **Tree pit accessories:** Irrigation Pipe.
 - **Tree pit backfill:** Excavated material.
 - **Rootball support:** 40-35-00/705 Short double staking;
45-40-65/360 type A Rootball securing assembly type A;
and 45-40-65/360 type C Rootball securing assembly type C.
- **Mulch:** 45-40-85/355 type A (Mulch) Sanitized and stabilized compost type A (Mulch) and 45-40-85/355 type B Sanitized and stabilized compost type B.
- **Supports:** 45-40-65/430 type B Stakes type B.
- **Labels:** 45-35-45/320 Delivery labels for plants.
- **Execution:** 40-35-00/600 Delivery of soil ameliorants;
40-35-00/601 Amenity planting generally;
40-35-00/603 Times of year for amenity planting;
40-35-00/605 Climatic conditions for amenity planting;
40-35-00/607 Notice for tree and shrub planting operations;
40-35-00/610 Water restrictions;
40-35-00/615 Applying compost to topsoil;
40-35-00/623 type A Applying mycorrhizal inoculant to topsoil type A;
40-35-00/642 Planting amenity trees in pits;
40-35-00/646 Application rates for ameliorants to backfill;
40-35-00/692 Applying loose mulch around trees;
40-35-00/705 Short double staking;
40-35-00/713 Placing tree root barriers in pits;
40-35-00/641 Planting semi-mature trees to BS 4043;
and 40-35-00/651 Installing tree pit irrigation, drainage and ventilation pipes.
- **System completion:** 40-35-00/801 Operations immediately after planting;
40-35-00/802 Establishment of new planting;
40-35-00/803 Weeding new planting;
40-35-00/806 Watering new planting;
40-35-00/807 Final mulching of planting beds and trees;
40-35-00/809 Plants that have failed to thrive;
and 40-35-00/810 type A Instructions for future maintenance type A.

Products

45-35-45/320 Delivery labels for plants

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Standard:** To National Plant Specification standards.
- **Labels:** Provide for each group of plants

- **Information required:** Employer's name and project reference;
The full botanical name;
and Summary of specification criteria.

45-40-65/360 Rootball securing assembly type C

- **Manufacturer:** GreenBlue Urban Ltd
- **Product reference:** ReR1000
- **Roll depth:** Submit proposals. Depth to suit installation situation

45-40-65/430 Stakes type B

- **Manufacturer:** Contractor's choice.
- **Material:** Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots. Pointed lower end.
- **Preservative treatment:** Manufacturer's standard.
- **Size (minimum):** 100mm

45-40-85/355 Sanitized and stabilized compost type A (Mulch)

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-00/190 Amenity planting maintenance system.

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** In accordance with PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** 6.0–8.0.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 10-40mm Particle size.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.

45-40-85/355 Sanitized and stabilized compost type B

- **Supplier:**
- **Source:**
- **Standard:** In accordance with PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** 7.0–8.7.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 99% passing 25 mm screen and 90% passing 10 mm screen mesh aperture.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.

45-40-90/305 Nursery stock generally

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Condition:** Materially undamaged, sturdy, healthy and vigorous.
- **Appearance:** Of good shape and without elongated shoots, appropriate to species and variety.
- **Hardiness:** Grown in a suitable environment and hardened off.
- **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
- **Budded or grafted plants:** Bottom worked. Visible suckers to be removed flush with rootstock. Trees to be budded or grafted on fully compatible rootstock appropriate to the type. Union to be well-called.
- **Root system and condition:** Balanced with branch system.
- **Species:** True to name.

45-40-90/345 Container grown trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **General requirements:** 45-40-90/305 Nursery stock generally.
- **Supplied by:** Submit proposals.
- **Standards:** In accordance with the National plant specification.
- **Root condition and protection:** Container grown. Plants to be centred in the container, well rooted, firm and moist on delivery. Surface of the growing medium to be free of all weeds. Growing container to be Airpot, hessian wrapped for delivery to site.
- **Origin and provenance:** Grown in the United Kingdom for at least one growing season.
- **Shape:** Natural.
- **Execution:** 45-40-90/610 Plants reserved at supplier's premises; 45-40-90/614 Plant handling, storage and transport; 45-40-90/618 Times of year for planting; and 45-40-90/620 Temporary labelling and information to National Plant Specification.

Execution

40-35-00/600 Delivery of soil ameliorants

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Submissions:** Details of recent chemical and physical analysis before ordering.
- **Delivery to site:** Contractor's choice.

40-35-00/601 Amenity planting generally

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Standard:** To HTA 'Handling and establishing landscape plants'.
- **Planting:** Upright or well balanced with best side to front.

40-35-00/603 Times of year for amenity planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Deciduous trees and shrubs:** Late October to late March.
- **Conifers and evergreens:** September/ October or April/ May.

40-35-00/605 Climatic conditions for amenity planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

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

40-35-00/607 Notice for tree and shrub planting operations

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Give notice before:** Planting shrubs and Planting trees into previously dug pits.
- **Period of notice:** 3 working days.

40-35-00/610 Water restrictions

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

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

40-35-00/615 Applying compost to topsoil

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Locations for application:** All planting areas.
- **Application rate:**
 - **for trees and shrubs:** Trees : Incorporate 100mm layer to full depth of topsoil layer across area of tree pit.
Shrub beds and Hedgerows: Incorporate 50mm minimum into top 200mm of topsoil layer. Increased depth maybe required to ameliorate soil deficiencies subject to Soil analysis report.
 - **In grassed areas:** 25 mm thick layer.
- **Timing:** Apply prior to cultivation.

40-35-00/623 Applying mycorrhizal inoculant to topsoil type A

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Depth:** To maintain contact with full depth of root system. Required for tree planting only

40-35-00/641 Planting semi-mature trees to BS 4043

- **Standard:** Prepare roots and transplant to BS 4043 and BS 8545. Backfill around rootball in lightly compacted layers of 150mm .

40-35-00/642 Planting amenity trees in pits

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Dimensions:**
 - **Plan size (minimum):** Min 2000 x 2000 mm.

- **Depth (minimum):** Same as rootball.
- **Sloping ground:** Maintain minimum depth throughout.
- **Pit bottoms:**
 - **Generally:** Break up. Slightly raise centre.
 - **Break up depth (nominal):** 200 mm. Firm below rootball to prevent settlement
- **Pit sides:** Vertical. Scarify.

40-35-00/646 Application rates for ameliorants to backfill

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Ameliorant and conditioner application rate (minimum):** Apply mycorrhizal in accordance with suppliers recommendations. Compost as clause 40-35-00/615

40-35-00/651 Installing tree pit irrigation, drainage and ventilation pipes

- **Siting:** All tree pits.
- **Depth of excavation:** Refer to contract drawings for excavation depths
- **Aggregate layer depth:** Varies to create falls away from tree locations
- **Irrigation pipes:** Lay in circle around sides of rootball.
- **Completed pits:** Test for free drainage before planting.

40-35-00/692 Applying loose mulch around trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Preparation:** Clear weeds. Water soil thoroughly.
- **Coverage:** In a circular area of 500 mm radius measured from tree stem and 75 mm depth.
- **Finished level of mulch:** 50 mm below adjacent grassed or paved areas.

40-35-00/705 Short double staking

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **General:** Do not impede natural movement of plants or restrict growth.
- **Height of stakes:** Cut to approximately 600 mm above ground level. Fix cross member securely
- **Fixing accessories:** GreenBlue Urban Natureties or similar approved and galvanised stake nails.

40-35-00/713 Placing tree root barriers in pits

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Siting:** install where Rootballs are within 2.0 m of a building foundation, 3.0 m of underground service routes or within 1.5m of hard surface edges.
- **Depth (nominal) of top of root barrier below finished soil level:** Flush
- **Installation:** With sides vertical. Install barriers in linear arrangement not encircling tree rootball. Barriers to extend along line of hard landscape or service run for a minimum of 4m in both directions from tree centre.

45-40-90/610 Plants reserved at supplier's premises

Shared by: 45-40-90/345 Container grown trees; and 45-40-90/395 Container grown shrubs.

- **Types and species:** Trees and shrubs

- **Pre-delivery inspection:** Give notice.
- **Labelling:** Identify inspected plants as reserved for use on this project.

45-40-90/614 Plant handling, storage and transport

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Standard:** In accordance with HTA 'Handling and establishing landscape plants'.
- **Extreme cold:** Protect plants from frost.
- **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- **Packaging of bulk quantities:** Pallets or bins sealed with polyethylene and shrink wrapped.

45-40-90/618 Times of year for planting

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Bare root stock:** Generally early November to late March however avoid planting from January onward unless provision for adequate watering can be made or planting done with cold stored plants.
- **Container grown nursery stock:** All year however avoid planting outside November to March period unless provision for adequate watering can be made.

System completion

40-35-00/803 Weeding new planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Weed control:**
 - **General:** Keep planting beds clear of weeds.
 - **Area:** Maintain a weed free area around each tree and shrub.
 - **Diameter (minimum):** 1.0m for trees and full areas of ornamental shrub planting

40-35-00/807 Final mulching of planting beds and trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Timing:** At end of the maintenance period.
- **Watering:** Thoroughly moisten soil before remulching. Water where necessary.
- **Depth of mulch (minimum):** 75 mm.

40-35-00/809 Plants that have failed to thrive

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Defects due to materials or workmanship not in accordance with the Contract:**
 - **Exclusions:** Theft or malicious damage after completion.
 - **Rectification:** Replace with equivalent plants/ trees/ shrubs.
- **Replacements:** To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- **Timing of making good:** By 31 December of the year in which the defect is identified.

40-35-00/810 Instructions for future maintenance type A

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; and 40-35-00/170 Pit-planted semi-mature tree system.

- **Recommended procedures for maintenance of planting work for one year:**
 - **Format:** Printed.
 - **Timing:** Before end of maintenance period.
 - **Content:** Schedule of ongoing maintenance problems experienced during the rectification period.

Ω End of system

9015-012

Pit-planted small tree or shrub system

22/06/2015 - 14:55

40-35-00/175 Pit-planted small tree or shrub system

System outline

40-35-00/175 Pit-planted small tree or shrub system

- **System performance:** Healthy establishment of all planting.
- **Preparatory work to soil:**
 - **Herbicide:** 45-40-05/371 Non-selective systemic herbicides.
- **Trees:** 45-40-90/345 Container grown trees and 45-40-90/395 Container grown shrubs.
- **Tree pit backfill:** Excavated material and 40-35-00/509 Tree and shrub pit backfilling material.
- **Mulch:** 45-40-85/355 type A (Mulch) Sanitized and stabilized compost type A (Mulch) and 45-40-85/355 type C (soil improver) Sanitized and stabilized compost type C (soil improver).
- **Supports:** 45-40-65/430 type A Stakes type A;
45-40-65/360 type B Rootball securing assembly type B;
and 45-40-65/360 type D Rootball securing assembly type D.
- **Labels:** 45-35-45/320 Delivery labels for plants.
- **Execution:** 40-35-00/600 Delivery of soil ameliorants;
40-35-00/601 Amenity planting generally;
40-35-00/603 Times of year for amenity planting;
40-35-00/605 Climatic conditions for amenity planting;
40-35-00/607 Notice for tree and shrub planting operations;
40-35-00/610 Water restrictions;
40-35-00/615 Applying compost to topsoil;
40-35-00/623 type A Applying mycorrhizal inoculant to topsoil type A;
40-35-00/633 Regular setting out of amenity planting;
40-35-00/635 Setting out of formal hedging;
40-35-00/642 Planting amenity trees in pits;
40-35-00/643 Planting amenity shrubs in pits;
40-35-00/645 type A Planting formal hedges in trenches type A;
40-35-00/646 Application rates for ameliorants to backfill;
40-35-00/683 Applying fertilizer in solution;
40-35-00/692 Applying loose mulch around trees;
40-35-00/702 Short single staking;
40-35-00/705 Short double staking;
40-35-00/713 Placing tree root barriers in pits;
40-35-00/621 Applying soil ameliorant to topsoil;
40-35-00/623 type B Applying mycorrhizal inoculant to topsoil type B;
and 40-35-00/645 type B Planting formal hedges in trenches type B.
- **System completion:** 40-35-00/801 Operations immediately after planting;
40-35-00/802 Establishment of new planting;
40-35-00/803 Weeding new planting;
40-35-00/806 Watering new planting;
40-35-00/807 Final mulching of planting beds and trees;
40-35-00/809 Plants that have failed to thrive;
and 40-35-00/810 type B Instructions for future maintenance type B.

Products

45-35-45/320 Delivery labels for plants

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Standard:** To National Plant Specification standards.
- **Labels:** Provide for each group of plants
- **Information required:** Employer's name and project reference;
The full botanical name;
and Summary of specification criteria.

45-40-05/371 Non-selective systemic herbicides

Shared by: 40-35-00/175 Pit-planted small tree or shrub system; 40-35-00/190 Amenity planting maintenance system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001.
- **Target weeds:** Perennial weeds and All broad leaved weeds.
- **Type of herbicide:** Contractor's choice.
- **Execution:** 45-40-05/607 Application of non-selective systemic herbicides.

45-40-65/360 Rootball securing assembly type D

- **Manufacturer:** GreenBlue Urban Ltd
- **Product reference:** ReR1000
- **Roll depth:** 1000 mm.

45-40-65/430 Stakes type A

- **Manufacturer:** Contractor's choice.
- **Material:** Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots. Pointed lower end.
- **Preservative treatment:** Manufacturer's standard.
- **Size (minimum):** Diameter - 75mm, Length - as necessary to securely support tree

45-40-85/355 Sanitized and stabilized compost type A (Mulch)

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-00/190 Amenity planting maintenance system.

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** In accordance with PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** 6.0–8.0.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 10-40mm Particle size.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.

- **Texture:** Friable.
- **Objectionable odour:** Not permitted.

45-40-85/355 Sanitized and stabilized compost type C (soil improver)

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** In accordance with PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** 7.0–8.7.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 99% passing 25 mm screen and 90% passing 10 mm screen mesh aperture.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.

45-40-90/305 Nursery stock generally

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Condition:** Materially undamaged, sturdy, healthy and vigorous.
- **Appearance:** Of good shape and without elongated shoots, appropriate to species and variety.
- **Hardiness:** Grown in a suitable environment and hardened off.
- **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
- **Budded or grafted plants:** Bottom worked. Visible suckers to be removed flush with rootstock. Trees to be budded or grafted on fully compatible rootstock appropriate to the type. Union to be well-called.
- **Root system and condition:** Balanced with branch system.
- **Species:** True to name.

45-40-90/345 Container grown trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **General requirements:** 45-40-90/305 Nursery stock generally.
- **Supplied by:** Submit proposals.
- **Standards:** In accordance with the National plant specification.
- **Root condition and protection:** Container grown. Plants to be centred in the container, well rooted, firm and moist on delivery. Surface of the growing medium to be free of all weeds. Growing container to be Airpot, hessian wrapped for delivery to site.
- **Origin and provenance:** Grown in the United Kingdom for at least one growing season.
- **Shape:** Natural.
- **Execution:** 45-40-90/610 Plants reserved at supplier's premises;
45-40-90/614 Plant handling, storage and transport;
45-40-90/618 Times of year for planting;
and 45-40-90/620 Temporary labelling and information to National Plant Specification.

45-40-90/395 Container grown shrubs

- **General requirements:** 45-40-90/305 Nursery stock generally.
- **Supplied by:** Contractor's choice.
- **Standards:** In accordance with the National plant specification.
- **Botanical name:** Refer to drawings for planting specification
- **Root condition and protection:** Container grown. Plants to be centred in the container, well rooted, firm and moist on delivery. Surface of the growing medium to be free of all weeds. Container to have adequate holes for drainage when placed on any substrate.
- **Habit:** Strong form appropriate to the species
- **Origin and provenance:** Grown in the United Kingdom for at least one growing season.
- **Execution:** 45-40-90/610 Plants reserved at supplier's premises;
45-40-90/614 Plant handling, storage and transport;
45-40-90/618 Times of year for planting;
and 45-40-90/620 Temporary labelling and information to National Plant Specification.

Custom made products

40-35-00/509 Tree and shrub pit backfilling material

- **Composition:**

Execution

40-35-00/600 Delivery of soil ameliorants

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Submissions:** Details of recent chemical and physical analysis before ordering.
- **Delivery to site:** Contractor's choice.

40-35-00/601 Amenity planting generally

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Standard:** To HTA 'Handling and establishing landscape plants'.
- **Planting:** Upright or well balanced with best side to front.

40-35-00/603 Times of year for amenity planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Deciduous trees and shrubs:** Late October to late March.
- **Conifers and evergreens:** September/ October or April/ May.

40-35-00/605 Climatic conditions for amenity planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

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

40-35-00/607 Notice for tree and shrub planting operations

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Give notice before:** Planting shrubs and Planting trees into previously dug pits.
- **Period of notice:** 3 working days.

40-35-00/610 Water restrictions

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

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

40-35-00/615 Applying compost to topsoil

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Locations for application:** All planting areas.
- **Application rate:**
 - **for trees and shrubs:** Trees : Incorporate 100mm layer to full depth of topsoil layer across area of tree pit.
Shrub beds and Hedgerows: Incorporate 50mm minimum into top 200mm of topsoil layer.
Increased depth maybe required to ameliorate soil deficiencies subject to Soil analysis report.
 - **In grassed areas:** 25 mm thick layer.
- **Timing:** Apply prior to cultivation.

40-35-00/623 Applying mycorrhizal inoculant to topsoil type A

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Depth:** To maintain contact with full depth of root system. Required for tree planting only

40-35-00/633 Regular setting out of amenity planting

- **Spacing:** Evenly, avoiding straight lines.
- **Planting density:** As Plant schedule.

40-35-00/635 Setting out of formal hedging

- **Generally:** Set out plants evenly.
- **Formation:** Two staggered rows.
- **Alignment:** Straight lines or smoothly flowing curves, following profile of the ground.
- **Distance between plants:** As plant schedule
- **Distance between rows:** As plant schedule

40-35-00/642 Planting amenity trees in pits

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Dimensions:**
 - **Plan size (minimum):** Min 2000 x 2000 mm.

- **Depth (minimum):** Same as rootball.
- **Sloping ground:** Maintain minimum depth throughout.
- **Pit bottoms:**
 - **Generally:** Break up. Slightly raise centre.
 - **Break up depth (nominal):** 200 mm. Firm below rootball to prevent settlement
- **Pit sides:** Vertical. Scarify.

40-35-00/643 Planting amenity shrubs in pits

- **Dimensions:**
 - **Plan size (minimum):** Wide enough to accommodate roots when fully spread.
 - **Depth (minimum):** 75 mm deeper than root system.
- **Sloping ground:** Maintain minimum depth throughout.
- **Pit bottoms:**
 - **Generally:** Break up.
 - **Break up depth (nominal):** 150 mm.
 - **Treatment:** Work soil ameliorant into pit bottoms.
- **Pit sides:** Vertical. Scarify.

40-35-00/645 Planting formal hedges in trenches type A

- **Trench size:**
 - **Width:** 800 mm.
 - **Depth:** 400mm
- **Backfilling:** Partially backfill around each plant as planting proceeds. Complete backfilling to top of trench in batches, firming in plants.
- **Sloping ground:** Maintain minimum depth throughout.
- **Trench bottoms:**
 - **Generally:** Break up. Generally horizontal.
 - **Break up depth (nominal):** 150 mm.
- **Trench sides:** Vertical. Scarify.

40-35-00/646 Application rates for ameliorants to backfill

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Ameliorant and conditioner application rate (minimum):** Apply mycorrhizal in accordance with suppliers recommendations. Compost as clause 40-35-00/615

40-35-00/692 Applying loose mulch around trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Preparation:** Clear weeds. Water soil thoroughly.
- **Coverage:** In a circular area of 500 mm radius measured from tree stem and 75 mm depth.
- **Finished level of mulch:** 50 mm below adjacent grassed or paved areas.

40-35-00/702 Short single staking

- **General:** Do not impede natural movement of plants or restrict growth.
- **Height of stakes:** Cut to approximately 600 mm above ground level.

- **Position:** Secure tree firmly but not rigidly to stake within 25 mm of top of stake.
- **Number of ties:** One.
- **Fixing accessories:** Flexible webbing.

40-35-00/705 Short double staking

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **General:** Do not impede natural movement of plants or restrict growth.
- **Height of stakes:** Cut to approximately 600 mm above ground level. Fix cross member securely
- **Fixing accessories:** GreenBlue Urban Natureties or similar approved and galvanised stake nails.

40-35-00/713 Placing tree root barriers in pits

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Siting:** install where Rootballs are within 2.0 m of a building foundation, 3.0 m of underground service routes or within 1.5m of hard surface edges.
- **Depth (nominal) of top of root barrier below finished soil level:** Flush
- **Installation:** With sides vertical. Install barriers in linear arrangement not encircling tree rootball. Barriers to extend along line of hard landscape or service run for a minimum of 4m in both directions from tree centre.

45-40-05/607 Application of non-selective systemic herbicides

- **Target weeds:** All perennial weeds.
- **Application rate:** Contractor's choice.
- **Timing and frequency:** Apply as necessary to maintain planting areas as weed free.
- **Areas not to be sprayed:** Desirable herbaceous plantings or close enough to any ornamental plant to risk contact. Hand weed where spraying can not be achieved without risk to planting.
- **Disposal of arisings:**
 - **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.
 - **Operations:** Remove to contractor's tip.

45-40-90/610 Plants reserved at supplier's premises

Shared by: 45-40-90/345 Container grown trees; and 45-40-90/395 Container grown shrubs.

- **Types and species:** Trees and shrubs
- **Pre-delivery inspection:** Give notice.
- **Labelling:** Identify inspected plants as reserved for use on this project.

45-40-90/614 Plant handling, storage and transport

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Standard:** In accordance with HTA 'Handling and establishing landscape plants'.
- **Extreme cold:** Protect plants from frost.
- **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- **Packaging of bulk quantities:** Pallets or bins sealed with polyethylene and shrink wrapped.

45-40-90/618 Times of year for planting

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Bare root stock:** Generally early November to late March however avoid planting from January onward unless provision for adequate watering can be made or planting done with cold stored plants.
- **Container grown nursery stock:** All year however avoid planting outside November to March period unless provision for adequate watering can be made.

System completion

40-35-00/803 Weeding new planting

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Weed control:**
 - **General:** Keep planting beds clear of weeds.
 - **Area:** Maintain a weed free area around each tree and shrub.
 - **Diameter (minimum):** 1.0m for trees and full areas of ornamental shrub planting

40-35-00/807 Final mulching of planting beds and trees

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Timing:** At end of the maintenance period.
- **Watering:** Thoroughly moisten soil before remulching. Water where necessary.
- **Depth of mulch (minimum):** 75 mm.

40-35-00/809 Plants that have failed to thrive

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; and 40-35-00/175 Pit-planted small tree or shrub system.

- **Defects due to materials or workmanship not in accordance with the Contract:**
 - **Exclusions:** Theft or malicious damage after completion.
 - **Rectification:** Replace with equivalent plants/ trees/ shrubs.
- **Replacements:** To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- **Timing of making good:** By 31 December of the year in which the defect is identified.

40-35-00/810 Instructions for future maintenance type B

- **Recommended procedures for maintenance of planting work for one year:**
 - **Format:** Printed.
 - **Timing:** Before end of maintenance period.
 - **Content:** Schedule of ongoing maintenance problems experienced during the rectification period.

Ω End of system

9015-012

Amenity planting maintenance system

22/06/2015 - 14:55

40-35-00/190 Amenity planting maintenance system

System outline

40-35-00/190 Amenity planting maintenance system

- **Spot weedkilling herbicide:** 45-40-05/371 Non-selective systemic herbicides.
- **Fertilizer:** 45-40-85/395 Inorganic fertilizer.
- **Mulch:** 45-40-85/355 type A (Mulch) Sanitized and stabilized compost type A (Mulch).
- **Material for making up levels and refilling at tree grilles:** Approved topsoil
- **System facility management:** 40-35-00/904 Mechanical equipment use in amenity plant maintenance operations;
40-35-00/905 Shrub and herbaceous areas;
40-35-00/909 Reinstatement after maintenance;
40-35-00/910 Disposal of arisings;
40-35-00/911 Temporary protection of existing grass;
40-35-00/912 Water restrictions;
40-35-00/913 Watering;
40-35-00/916 Delivery of maintenance fertilizers;
40-35-00/917 Fertilizing amenity planting and herbaceous areas;
40-35-00/920 Applying top dressing;
40-35-00/921 Weed control generally;
40-35-00/922 Performance based weed control;
40-35-00/924 Hand weeding;
40-35-00/925 Weeding loose mulch;
40-35-00/930 Applying fungicide to trees and shrubs;
40-35-00/931 Applying insecticide to trees and shrubs;
40-35-00/932 Litter removal;
40-35-00/942 Soil level adjustment;
40-35-00/943 Maintenance of loose mulch;
40-35-00/951 Refirming of trees and shrubs;
40-35-00/953 Treatment of tree wounds;
40-35-00/954 Prevention of disease transmission;
40-35-00/955 Bark damage;
40-35-00/957 Dead and diseased plants;
40-35-00/961 Tree work generally;
40-35-00/962 Pruning amenity trees and shrubs;
40-35-00/964 Formative pruning of young trees;
40-35-00/965 Pruning of excessive overhang;
40-35-00/970 Pruning ornamental shrubs;
40-35-00/971 Pruning flowering species of shrubs and roses;
40-35-00/978 Trimming rapidly establishing hedges;
;
40-35-00/991 Maintaining plant supports generally;
40-35-00/994 Maintaining tree stakes and ties;
and 40-35-00/997 Maintaining tree guy wires.

Products

45-40-05/371 Non-selective systemic herbicides

Shared by: 40-35-00/175 Pit-planted small tree or shrub system; 40-35-00/190 Amenity planting maintenance system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001.
- **Target weeds:** Perennial weeds and All broad leaved weeds.
- **Type of herbicide:** Contractor's choice.
- **Execution:** 45-40-05/607 Application of non-selective systemic herbicides.

45-40-85/355 Sanitized and stabilized compost type A (Mulch)

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-00/190 Amenity planting maintenance system.

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** In accordance with PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** 6.0–8.0.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 10-40mm Particle size.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.

45-40-85/395 Inorganic fertilizer

- **Supplier:** Submit proposals.
- **Standard:** In accordance with The EC Fertilisers (England and Wales) Regulations 2006.
- **Fertilizer type:** General purpose, subject to any requirement to adjust soil nutrient balance.
- **Availability to plants:** Slow release.

Execution

45-40-05/607 Application of non-selective systemic herbicides

- **Target weeds:** All perennial weeds.
- **Application rate:** Contractor's choice.
- **Timing and frequency:** Apply as necessary to maintain planting areas as weed free.
- **Areas not to be sprayed:** Desirable herbaceous plantings or close enough to any ornamental plant to risk contact. Hand weed where spraying can not be achieved without risk to planting.
- **Disposal of arisings:**

- **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.
- **Operations:** Remove to contractor's tip.

System facility management

40-35-00/901 Management objectives for amenity planting

Shared by: 40-35-00/905 Shrub and herbaceous areas; 40-35-00/909 Reinstatement after maintenance; 40-35-00/910 Disposal of arisings; 40-35-00/911 Temporary protection of existing grass; 40-35-00/912 Water restrictions; 40-35-00/913 Watering; 40-35-00/916 Delivery of maintenance fertilizers; 40-35-00/917 Fertilizing amenity planting and herbaceous areas; 40-35-00/920 Applying top dressing; 40-35-00/921 Weed control generally; 40-35-00/922 Performance based weed control; 40-35-00/924 Hand weeding; 40-35-00/925 Weeding loose mulch; 40-35-00/930 Applying fungicide to trees and shrubs; 40-35-00/931 Applying insecticide to trees and shrubs; 40-35-00/932 Litter removal; 40-35-00/942 Soil level adjustment; 40-35-00/943 Maintenance of loose mulch; 40-35-00/951 Refirming of trees and shrubs; 40-35-00/953 Treatment of tree wounds; 40-35-00/954 Prevention of disease transmission; 40-35-00/955 Bark damage; 40-35-00/957 Dead and diseased plants; 40-35-00/961 Tree work generally; 40-35-00/962 Pruning amenity trees and shrubs; 40-35-00/964 Formative pruning of young trees; 40-35-00/965 Pruning of excessive overhang; 40-35-00/970 Pruning ornamental shrubs; 40-35-00/971 Pruning flowering species of shrubs and roses; 40-35-00/978 Trimming rapidly establishing hedges; 40-35-00/991 Maintaining plant supports generally; 40-35-00/994 Maintaining tree stakes and ties; and 40-35-00/997 Maintaining tree guy wires.

- **Duration:** 2 years.
- **Aims:** Improved landscape visual amenity.
- **Management outcomes:** As Maintenance schedule.

40-35-00/902 Notice periods for maintenance visits

Shared by: 40-35-00/905 Shrub and herbaceous areas; 40-35-00/909 Reinstatement after maintenance; 40-35-00/910 Disposal of arisings; 40-35-00/911 Temporary protection of existing grass; 40-35-00/912 Water restrictions; 40-35-00/913 Watering; 40-35-00/916 Delivery of maintenance fertilizers; 40-35-00/917 Fertilizing amenity planting and herbaceous areas; 40-35-00/920 Applying top dressing; 40-35-00/921 Weed control generally; 40-35-00/922 Performance based weed control; 40-35-00/924 Hand weeding; 40-35-00/925 Weeding loose mulch; 40-35-00/930 Applying fungicide to trees and shrubs; 40-35-00/931 Applying insecticide to trees and shrubs; 40-35-00/932 Litter removal; 40-35-00/942 Soil level adjustment; 40-35-00/943 Maintenance of loose mulch; 40-35-00/951 Refirming of trees and shrubs; 40-35-00/953 Treatment of tree wounds; 40-35-00/954 Prevention of disease transmission; 40-35-00/955 Bark damage; 40-35-00/957 Dead and diseased plants; 40-35-00/961 Tree work generally; 40-35-00/962 Pruning amenity trees and shrubs; 40-35-00/964 Formative pruning of young trees; 40-35-00/965 Pruning of excessive overhang; 40-35-00/970 Pruning ornamental shrubs; 40-35-00/971 Pruning flowering species of shrubs and roses; 40-35-00/978 Trimming rapidly establishing hedges; 40-35-00/991 Maintaining plant supports generally; 40-35-00/994 Maintaining tree stakes and ties; and 40-35-00/997 Maintaining tree guy wires.

- **Give notice before:** Applying fertilizer and Watering.
- **Period of notice:** 2 days.

40-35-00/904 Mechanical equipment use in amenity plant maintenance operations

- **General:** Minimize use. Do not damage trees and shrubs.
- **Restrictions:**
 - **Proximity to plants:** Do not use mowers, nylon filament rotary cutters and similar powered tools within 100 mm of plant stems.
 - **Prohibited equipment:** Chippers and Shredders.

- **Times during which mechanical equipment may be used:** Between 10:00 and 16:00 on weekdays.

40-35-00/905 Shrub and herbaceous areas

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Planted areas:** Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
- **Firming up:** Gently firm loosened soil around plants. Straighten leaning trees and shrubs.
- **Dead and damaged plants:** Remove.
- **Mulch and matting materials:** Leave mulch as even cover after any maintenance operation
- **Replacement plants:**
 - **Size of pits and plants:** To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.

40-35-00/909 Reinstatement after maintenance

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings:** Make good immediately.
- **Cleanliness:** Leave the works in a clean tidy condition at completion and after maintenance operations.

40-35-00/910 Disposal of arisings

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **General:**
 - **Biodegradable arisings:** Remove to recycling facility.
 - **Grass cuttings:** Spread evenly.
 - **Tree roots and stumps:** Remove from site.
 - **Shrub and tree prunings:** Remove to recycling facility.
 - **Litter and nonbiodegradable arisings:** Remove from site.
 - **Diseased plant material:** Remove from site.
 - **Surplus topsoil following routine maintenance:** Remove from site.

40-35-00/911 Temporary protection of existing grass

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **General:** Protect areas affected by maintenance operations using boards and/ or tarpaulins. Do not place excavated or imported materials directly on grass.

40-35-00/912 Water restrictions

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **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.

40-35-00/913 Watering

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Supply:** No site supply available.
- **Quantity:** Wet full depth of topsoil.
- **Application:** Do not damage or loosen plants.
- **Compacted soil:** Loosen or scoop out. Direct water to rootzone.
- **Frequency:** As Maintenance schedule.

40-35-00/916 Delivery of maintenance fertilizers

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Submissions:** Details of recent chemical and physical analysis before ordering.
- **Delivery to site:** In original, sealed and fully labelled containers and mix according to manufacturer's written instructions.

40-35-00/917 Fertilizing amenity planting and herbaceous areas

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Time of year:** During April or May.
- **Method:** Spread evenly.
- **Application rate (minimum):** Submit proposals.

40-35-00/920 Applying top dressing

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Locations for application:** Ornamental beds.
- **Application:**
 - **Spreading:** Evenly on surface, in transverse directions.
 - **Timing:** Start of growing season.
 - **Application rate:** To top up to 75mm. PAS 100 Compost 10-40mm grade

40-35-00/921 Weed control generally

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Scope:** Ornamental beds and Trees.
- **General:** Keep clear of weeds and prevent from seeding. Prevent perennial weeds from becoming established.
- **Method:** By hand weeding;
By maintaining full thickness of mulch;
and By use of approved non-residual herbicides.
- **Individual trees and shrubs:** Maintain weed free area around each tree and shrub to the larger of 1 m diameter or the full surface of ornamental planting area.

40-35-00/922 Performance based weed control

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.

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

40-35-00/924 Hand weeding

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **General:** Remove weeds entirely, including roots.
- **Disturbance:** Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
- **Completion:** Rake area to a neat, clean condition.
- **Mulch:** Reinstate to original depth.

40-35-00/925 Weeding loose mulch

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Weeding:** Remove weeds growing on or in mulch.
- **Method:** Herbicide treatment.

40-35-00/930 Applying fungicide to trees and shrubs

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Fungicide application:** Use if required to target specific infection

40-35-00/931 Applying insecticide to trees and shrubs

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Insecticide application:** Use if required to target specific infestation

40-35-00/932 Litter removal

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Extraneous rubbish not arising from the contract work:** Collect and remove from site.

40-35-00/942 Soil level adjustment

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Level of soil and mulch at edges of beds:** Reduce to 50 mm below adjacent grass or hard surface.

40-35-00/943 Maintenance of loose mulch

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Thickness (minimum):** 75 mm.
- **Top up:** Annually.
- **Mulch spill on adjacent areas:** Remove weeds and rubbish and return to planted area.

40-35-00/951 Refirming of trees and shrubs

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Timing:** After strong winds, frost heave and other disturbances.
- **Refirming:** Tread around the base until firmly bedded.
- **Collars in soil at base of tree stems, created by tree movement:** Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

40-35-00/953 Treatment of tree wounds

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Cutting:** Keep wounds as small as possible. Cut cleanly back to sound wood using sharp, clean tools. Leave branch collars. Do not cut flush with stem or trunk. Set cuts so that water will not collect on cut area.
- **Fungicide and sealant:** Do not apply.

40-35-00/954 Prevention of disease transmission

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Standard:** To BS 3998.

40-35-00/955 Bark damage

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Wounds:**
 - **Sap bleeding:** Do not attempt to stop.
 - **Bark:** Remove ragged edges using a sharp knife.
 - **Wood:** Remove splintered wood from deep wounds.
 - **Size:** Keep wounds as small as possible.
- **Liquid or flux oozing from apparently healthy bark:** Give notice.

40-35-00/957 Dead and diseased plants

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Dead plant material:**
 - **Removal:** At the end of the growing season, check shrubs and remove dead foliage, dead wood, and broken or damaged plants, branches and stems.
 - **Timing:** As soon as possible.
 - **Replacement:** In the next suitable planting season.

40-35-00/961 Tree work generally

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Identification:** Before starting work agree which trees, shrubs and hedges to be removed or pruned.
- **Protection:** Avoid damage to neighbouring trees, plants and property.

- **Standards:** To BS 3998 and Health and Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- **Appearance:** Leave trees with a well balanced natural appearance. Favour a single central leading shoot.
- **Dead, dying, diseased wood and suckers:** Remove. Prune to promote healthy growth.
- **Timing:** As appropriate to the species.
- **Chain saw work:** Operatives must hold a Certificate of Competence.
- **Tree work:** To be carried out by a member of the Arboricultural Association.
- **Tree worker:** Contractor's choice.

40-35-00/962 Pruning amenity trees and shrubs

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Standard:** In accordance with good horticultural and arboricultural practice.
- **Pruning:**
 - **Removing branches:** Do not damage or tear the stem or bark.
 - **Wounds:** Keep as small as possible and cut cleanly back to sound wood.
 - **Cutting:** Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
 - **Larger branches:** Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- **Appearance:** Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
- **Tools:** Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- **Disease or infection:** Give notice if detected.
- **Growth retardants, fungicide or pruning sealant:** Do not use.

40-35-00/964 Formative pruning of young trees

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Type and timing of pruning operations:** Suit the plant species.
- **Time of year:** Do not prune during the late winter/ early spring sap flow period.
- **Young trees up to 4 m high:**
 - **Crown:** Prune by removing dead branches and reducing selected side branches by one third to preserve a well balanced head and ensure the development of a single strong leader.
 - **Duplicated branches and potentially weak or tight forks:** Remove. Cut back to live wood.
- **Whips or feathered trees:** Do not prune.
- **Operatives:** Contractor's choice.

40-35-00/965 Pruning of excessive overhang

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Timing:**
- **Operations:** Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.

- **Special requirements:** Allow ground cover plants to partially overlap paths and lawns.

40-35-00/970 Pruning ornamental shrubs

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **General:** Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
- **Suckers:** Remove by cutting back level with the source stem or root.

40-35-00/971 Pruning flowering species of shrubs and roses

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Time of year:**
 - **Winter flowering shrubs:** Spring.
 - **Shrubs flowering between March and July:** Immediately after the flowering period.
 - **Shrubs flowering between July and October:** Back to old wood in winter.
 - **Rose bushes:** Early spring to encourage basal growths and a balanced, compact habit.

40-35-00/978 Trimming rapidly establishing hedges

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **General:** Allow to reach planned height as rapidly as possible.
- **Form:** Trim back lateral branches moderately.

40-35-00/991 Maintaining plant supports generally

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Inspection:**
 - **Scope:** Check condition of stakes, ties, guys and guards.
 - **Frequency of checks:** At each scheduled maintenance visit.
- **Operations:**
 - **Broken or missing items:** Replace.
 - **Rubbing:** Prevent.
 - **Ties:** Adjust to accommodate growth.
 - **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.

40-35-00/994 Maintaining tree stakes and ties

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Inspection and maintenance times:** Immediately after strong winds.
- **Stakes:**
 - **Loose, broken or decayed stakes:** Replace to original specification.
 - **Stakes 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.
- **Ties:**
 - **Maintenance:** Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.

- **Chafing:** Where chafing has occurred, reposition or replace ties to prevent further chafing.
- **Removal of stakes and ties:**
 - **Timing:** During spring when no longer required to support the tree.
 - **Stake holes:** Fill with lightly compacted soil.

40-35-00/997 Maintaining tree guy wires

- **General requirements:** 40-35-00/901 Management objectives for amenity planting and 40-35-00/902 Notice periods for maintenance visits.
- **Inspection and maintenance times:** Immediately after strong winds and In spring.
- **Operations:**
 - **Loose or missing guy wires:** Replace or re-secure.
 - **Wires:** Adjust to suit stem growth. Provide correct and uniform tension.
- **Removal:** During spring when no longer required to support the tree.

Ω End of system

9015-012

Notch-planted tree and shrub system

22/06/2015 - 14:55

40-35-30/155 Notch-planted tree and shrub system

System outline

40-35-30/155 Notch-planted tree and shrub system

- **System performance:** 40-35-30/230 Aesthetic performance of forestry, biomass, hedging and roadside planting systems and 40-35-30/240 Biological and physiological performance of forestry, biomass, hedging and roadside planting systems.
- **Preparatory work to soil:**
 - **Herbicide:** 45-40-05/371 Non-selective systemic herbicides.
- **Trees:** 45-40-90/320 Bare root trees and 45-40-90/370 Bare root shrubs.
- **Mulch:** Wood chip mulch
- **Protection:** 45-40-65/400 Shrub protectors and 45-40-65/410 Tree protectors.
- **Labels:** 45-35-45/320 Delivery labels for plants.
- **Execution:** 40-35-30/601 Times of year for planting;
40-35-30/602 Climatic conditions;
40-35-30/604 Notice for tree planting operations;
40-35-30/606 Water restrictions;
40-35-30/616 Disposal of arisings;
40-35-30/621 Woodland work generally;
40-35-30/623 Cultivation of topsoil;
40-35-30/624 Finished levels of topsoil after settlement;
40-35-30/625 Preparation of undisturbed topsoil;
40-35-30/632 Regular setting out of forestry and biomass planting;
40-35-30/633 Setting out of hedging;
40-35-30/644 Notch planting;
40-35-30/652 Applying mycorrhizal inoculant;
40-35-30/671 Applying loose mulch to planting beds;
and 40-35-30/693 Installing tree guards.
- **System completion:** 40-35-30/801 Operations immediately after planting;
40-35-30/802 Establishment of new planting;
40-35-30/803 Weeding new planting;
40-35-30/804 Fertilizing new planting;
40-35-30/806 Watering new planting;
40-35-30/807 Final mulching of planting beds and trees;
40-35-30/809 Plants that have failed to thrive;
and 40-35-30/810 Instructions for future maintenance.

System performance

40-35-30/230 Aesthetic performance of forestry, biomass, hedging and roadside planting systems

- **Criteria:**
 - **Size:** Maximum height of mature plants.
 - **Visual:**

40-35-30/240 Biological and physiological performance of forestry, biomass, hedging and roadside planting systems

- **Criteria:**
 - **Growing conditions:** Hardiness and Soil type.
 - **Ecological:** Biodiversity.
 - **Maintenance:** Ease of establishment.

Products

45-35-45/320 Delivery labels for plants

Shared by: 40-35-00/170 Pit-planted semi-mature tree system; 40-35-00/175 Pit-planted small tree or shrub system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Standard:** To National Plant Specification standards.
- **Labels:** Provide for each group of plants
- **Information required:** Employer's name and project reference;
The full botanical name;
and Summary of specification criteria.

45-40-05/371 Non-selective systemic herbicides

Shared by: 40-35-00/175 Pit-planted small tree or shrub system; 40-35-00/190 Amenity planting maintenance system; and 40-35-30/155 Notch-planted tree and shrub system.

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001.
- **Target weeds:** Perennial weeds and All broad leaved weeds.
- **Type of herbicide:** Contractor's choice.
- **Execution:** 45-40-05/607 Application of non-selective systemic herbicides.

45-40-65/400 Shrub protectors

- **Manufacturer:** Submit proposals.
- **Shape:** Round.
- **Material:** Polypropylene.
- **Size:** 0.6 m high x 150 mm diameter.
- **Colour:** Manufacturer's standard.

45-40-65/410 Tree protectors

- **Manufacturer:** Submit proposals.
- **Shape:** Round.
- **Material:** Polypropylene.
- **Size:** 0.6 m high x 130 mm diameter.
- **Colour:** Manufacturer's standard.

45-40-90/305 Nursery stock generally

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Condition:** Materially undamaged, sturdy, healthy and vigorous.

- **Appearance:** Of good shape and without elongated shoots, appropriate to species and variety.
- **Hardiness:** Grown in a suitable environment and hardened off.
- **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
- **Budded or grafted plants:** Bottom worked. Visible suckers to be removed flush with rootstock. Trees to be budded or grafted on fully compatible rootstock appropriate to the type. Union to be well-callused.
- **Root system and condition:** Balanced with branch system.
- **Species:** True to name.

45-40-90/320 Bare root trees

- **General requirements:** 45-40-90/305 Nursery stock generally.
- **Supplied by:** Contractor's choice.
- **Standards:** In accordance with the National plant specification.
- **Root condition and protection:** Bare root (bagged - co-extruded polythene, black inside white outside), containing and enclosing the whole root system. and Root dip bareroot stock with Mycorrhizal product on lifting.
- **Origin and provenance:** British grown.
- **Shape:**
- **Execution:** 45-40-90/614 Plant handling, storage and transport;
45-40-90/618 Times of year for planting;
45-40-90/620 Temporary labelling and information to National Plant Specification;
and 45-40-90/630 Installing shrub protection.

45-40-90/370 Bare root shrubs

- **General requirements:** 45-40-90/305 Nursery stock generally.
- **Supplied by:** Contractor's choice.
- **Standards:** In accordance with the National plant specification.
- **Botanical name:**
- **Form:**
- **Age and condition:**
- **Height or spread:**
- **Root condition and protection:** Bare root (bagged - co-extruded polythene, black inside white outside), containing and enclosing the whole root system. and Root dip bareroot stock with Mycorrhizal product on lifting.
- **Habit:**
- **Number of breaks and branches (minimum):**
- **Origin and provenance:** British grown.
- **Execution:** 45-40-90/614 Plant handling, storage and transport;
45-40-90/618 Times of year for planting;
45-40-90/620 Temporary labelling and information to National Plant Specification;
and 45-40-90/630 Installing shrub protection.

Execution

40-35-30/601 Times of year for planting

- **Deciduous trees and shrubs:** Late October to late March.

- **Conifers and evergreens:** September/ October or April/ May.

40-35-30/602 Climatic conditions

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

40-35-30/604 Notice for tree planting operations

- **Give notice before:** Planting shrubs.
- **Period of notice:** 1 week.

40-35-30/606 Water restrictions

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

40-35-30/616 Disposal of arisings

- **Scope:** Maintain clean and tidy site.
- **Timing:** Before planting scheduled plant material.
- **General:**
 - **Biodegradable arisings:** Remove to recycling facility.
 - **Grass cuttings:** Remove to recycling facility.
 - **Tree roots and stumps:** Remove from site.
 - **Shrub and tree prunings:** Remove to recycling facility.
 - **Litter and nonbiodegradable arisings:** Remove from site.
 - **Diseased plant material:** Remove from site.
 - **Stones with any dimension exceeding:** 100 mm, remove from site.
 - **Contamination:** Remove from site material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

40-35-30/621 Woodland work generally

- **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.
- **Safety:** Comply with Arboriculture and Forestry Advisory Group Safety leaflets.

40-35-30/623 Cultivation of topsoil

- **Grading and cultivation:**
 - **Standard:** In accordance with BS 4428.
 - **Category:** B.
- **Working conditions:**
 - **Soil condition:** Reasonably dry and workable.
 - **Timing:** Within a few days before planting.
 - **Weather and ground conditions:** Suitably dry.
- **Compacted topsoil:** Break up to full depth.
- **Soil with root spread of trees and shrubs to be retained:** Do not dig or cultivate.
- **Tilth:**
 - **Generally:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
 - **Depth:** 250 mm.

- **Particle size (maximum):** 50mm.
- **Surface:**
 - **Contours:** Smooth and flowing, with falls for adequate drainage.
 - **Hollows and ridges:** Not permitted.
- **Remove visible weeds, roots and large stones with any dimensions exceeding:** 75 mm.
- **Give notice:** Prior to planting if any planting areas appear to be poorly draining or likely to exhibit persistent saturated soil conditions in the future.

40-35-30/624 Finished levels of topsoil after settlement

- **Height (maximum) above adjoining paving or kerbs:** 30 mm and soil levels graded locally to below adjacent surface finish to retain mulch depth if required.
- **Height below dpc of adjoining buildings (minimum):** 150 mm.
- **Height of shrub areas (maximum) above adjoining grass areas:** 50 mm and soil levels graded locally to below adjacent surface finish to retain mulch depth if required.
- **Height above adjoining lawns:** 50 mm and soil levels graded locally to below adjacent surface finish to retain mulch depth if required.
- **Tolerance for specified levels and gradients on sportsfields:**
 - **From levels or gradients shown on drawings:**
 - **From line between boning rods 30 m apart:**
- **Within root spread of existing trees:** Unchanged.
- **Adjoining soil areas:** Marry in.

40-35-30/625 Preparation of undisturbed topsoil

- **Hard ground:** Break up thoroughly.
- **Remove visible roots and large stones with a diameter greater than:** 75 mm.
- **Areas covered with turf or thick sward:** Dig over, plough or strip surface as required avoid vegetation regrowth.
- **Fallow period (minimum):** Two months.
- **Weed control:**
 - **Timing:** Contractor's choice.
 - **Treatment:** Suitable translocated non-residual herbicide

40-35-30/632 Regular setting out of forestry and biomass planting

- **Generally:** Set out plants evenly.
- **Formation:** Staggered rows.
- **Distance between trees:** Refer to Contract drawing planting plan and schedule.
- **Distance between rows:** Refer to Contract drawing planting plan and schedule.

40-35-30/633 Setting out of hedging

- **Generally:** Set out plants evenly.
- **Formation:** Two staggered rows.
- **Alignment:** Straight lines or smoothly flowing curves, following profile of the ground.
- **Distance between plants:** 400 mm.
- **Distance between rows:** 400 mm

40-35-30/644 Notch planting

- **Planting:** Cut neat notches in ground. Refit closely around plant without damaging roots.

40-35-30/652 Applying mycorrhizal inoculant

- **Application:** Apply to roots of bare root plants before planting and backfilling.

40-35-30/671 Applying loose mulch to planting beds

- **Preparation:** Clear weeds. Water soil thoroughly.
- **Coverage:** 75 mm depth.
- **Finished level of mulch:** 30 mm below adjacent grassed or paved areas.

40-35-30/693 Installing tree guards

- **Support:** Single timber stake.

45-40-05/607 Application of non-selective systemic herbicides

- **Target weeds:** All perennial weeds.
- **Application rate:** Contractor's choice.
- **Timing and frequency:** Apply as necessary to maintain planting areas as weed free.
- **Areas not to be sprayed:** Desirable herbaceous plantings or close enough to any ornamental plant to risk contact. Hand weed where spraying can not be achieved without risk to planting.
- **Disposal of arisings:**
 - **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.
 - **Operations:** Remove to contractor's tip.

45-40-90/614 Plant handling, storage and transport

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Standard:** In accordance with HTA 'Handling and establishing landscape plants'.
- **Extreme cold:** Protect plants from frost.
- **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- **Packaging of bulk quantities:** Pallets or bins sealed with polyethylene and shrink wrapped.

45-40-90/618 Times of year for planting

Shared by: 45-40-90/320 Bare root trees; 45-40-90/345 Container grown trees; 45-40-90/370 Bare root shrubs; and 45-40-90/395 Container grown shrubs.

- **Bare root stock:** Generally early November to late March however avoid planting from January onward unless provision for adequate watering can be made or planting done with cold stored plants.
- **Container grown nursery stock:** All year however avoid planting outside November to March period unless provision for adequate watering can be made.

45-40-90/630 Installing shrub protection

Shared by: 45-40-90/320 Bare root trees; and 45-40-90/370 Bare root shrubs.

- **Support:** Single timber stake.
- **General:** Do not impede natural movement of plants or restrict growth.

System completion

40-35-30/801 Operations immediately after planting

- **Watering:** Immediately after planting, water thoroughly. Do not damage or displace plants or soil.
- **Firming:** Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- **Top dressing depth (minimum):**

40-35-30/802 Establishment of new planting

- **Duration:** 1 year.
- **Soil condition:** Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.

40-35-30/803 Weeding new planting

- **Weed control:**
 - **General:** Keep planting beds clear of weeds.
 - **Area:** Maintain a weed free area around each tree and shrub.
 - **Diameter (minimum):** The larger of 1 m or the surface of the original planting pit.

40-35-30/804 Fertilizing new planting

- **Time of year:** March or April.
- **Application:**
 - **Method:** Spread evenly. Carefully lift and replace mulch materials.
 - **Application rate (minimum):** 200 g per transplant and 250 g per feathered, standard or larger tree.

40-35-30/806 Watering new planting

- **Quantity:** Wet full depth of topsoil.
- **Application:** Even and without damaging or displacing plants or soil.
- **Trees:** Spray crown when in leaf during warm weather.
- **Frequency:** As necessary to ensure establishment and continued thriving of planting.
- **Interval (nominal):** Weekly.
- **Timing:** Contractor's choice.

40-35-30/807 Final mulching of planting beds and trees

- **Timing:** At end of the maintenance period.
- **Watering:** Thoroughly moisten soil before remulching. Water where necessary.
- **Depth of mulch (minimum):** 75 mm.

40-35-30/809 Plants that have failed to thrive

- **Defects due to materials or workmanship not in accordance with the Contract:**
 - **Exclusions:** Theft or malicious damage after completion.
 - **Rectification:** Replace with equivalent plants/ trees/ shrubs.
- **Replacements:** To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.

- **Timing of making good:** By 31 December of the year in which the defect is identified.

40-35-30/810 Instructions for future maintenance

- **Recommended procedures for maintenance of planting work for one year:**
 - **Format:** Printed.
 - **Timing:** Before end of maintenance period.
 - **Content:** Schedule of ongoing maintenance problems experienced during the rectification period.

Ω End of system

9015-012

Turf planting system

22/06/2015 - 14:55

40-35-35/185 Turf planting system

System outline

40-35-35/185 Turf planting system

- **Preparatory work to soil:**
 - **Fill to minor hollows:** 45-40-85/325 Imported topsoil to BS 3882.
 - **Herbicide:** 45-40-05/351 Non-selective contact herbicides.
 - **Fertilizer:** 45-40-85/400 type A Organic fertilizer type A.
- **Turf:** 45-40-95/331 Cultivated turf.
- **Top dressing:** 45-40-85/410 Compost dressing.
- **Execution:** 40-35-35/601 Notice for seeding and turfing operations;
40-35-35/602 Water restrictions;
40-35-35/612 Cultivation of topsoil for seeded and turfed areas;
40-35-35/617 Applying soil ameliorant;
40-35-35/623 Finished levels of topsoil after settlement;
40-35-35/624 Setting out of seeded and turfed areas;
40-35-35/643 Turfing on banks exceeding 30° slope;
and 40-35-35/645 Trimming turf around trees.
- **System completion:** 40-35-35/803 Failures of seeding and turfing;
40-35-35/811 Watering grass swards;
40-35-35/851 Grass swards first cut;
40-35-35/853 Cutting amenity grass;
and 40-35-35/813 Applying top dressing.

Products

45-40-05/351 Non-selective contact herbicides

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001.
- **Target weeds:** All broad leaved weeds.
- **Type of herbicide:** Contractor's choice.
- **Execution:** 45-40-05/603 Application of non-selective contact herbicides.

45-40-85/325 Imported topsoil to BS 3882

Shared by: 10-35-35/185 Topsoil filling system; 10-35-35/606 Topsoil analysis; and 40-35-35/185 Turf planting system.

- **Supplier:** Submit proposals.
- **Source:** Submit proposals.
- **Standard:** To BS 3882.
- **Classification:** Unless otherwise specified all 'topsoil' for planting, turfing or seeding shall comply with the general requirements of BS3882:2007, Grade - Multipurpose. However the following additional constraints apply: pH Value: 5.5-7.5.
- **Particle grade:** Textural classification: 'Loam soils' are acceptable within the following parameters: Silt = 0-65% / Sand = 30-70% / Clay = 5-30%.

45-40-85/400 Organic fertilizer type A

- **Supplier:** Submit proposals.
- **Standard:** In accordance with The EC Fertilisers (England and Wales) Regulations 2006.
- **Fertilizer type:** Pre-seeding / pre-turfing fertilizer containing mycorrhizal fungi .
- **Availability to plants:** Slow release.

45-40-85/410 Compost dressing

Shared by: 40-35-35/185 Turf planting system; and 40-35-35/190 Amenity grass maintenance system.

- **Supplier:** Submit proposals.
- **Source:** Contractor's choice.
- **Compost type:** Sanitized and stabilized compost
- **Standard:** To PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** max 7.0.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 100% passing screen mesh aperture of 5 mm.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.
- **Declaration of analysis:** Submit.
- **Additional analyses:** Chloride content - Max 800mg/l

45-40-95/300 Turf, pre-planted and pre-seeded products generally

- **Condition:** Materially undamaged, sturdy, healthy and vigorous.
- **Hardiness:** Grown in a suitable environment and hardened off.
- **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
- **Species:** True to name.

45-40-95/331 Cultivated turf

- **General requirements:** 45-40-95/300 Turf, pre-planted and pre-seeded products generally.
- **Supplied by:** Submit proposals.
- **Third party certification:** To Turfgrass Growers Association (TGA) quality standards.
- **Turf dimensions:** 0.6 x 1.65 m.
- **Sward:**
 - **Seed mix:** General amenity and To BS 3969, with no perennial ryegrass.
 - **Origin and provenance:** British grown.
 - **Thatch height:** 5–15 mm.
 - **Cut height:** 35 mm or lower.
- **Substrate:**
 - **Embedded mesh:** Where present must not project above thatch layer.
 - **Strength:** Able to be placed and unrolled without breaking.
 - **Weight:** Less than 20 kg/m².

- **Properties of soil used for turf production:** Well drained sandy loam.
- **Soil thickness:** 5–15 mm.
- **Execution:** 45-40-95/605 Inspection of turf;
45-40-95/609 Handling, storage and transport of turf;
and 45-40-95/603 Certification of turfs.

Execution

40-35-35/601 Notice for seeding and turfing operations

- **Give notice before:** Seeding or turfing.
- **Period of notice:** 1 week.

40-35-35/602 Water restrictions

- **Timing:** If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/ turfing until instructed.

40-35-35/612 Cultivation of topsoil for seeded and turfed areas

- **Grading and cultivation:**
 - **Standard:** In accordance with BS 4428.
 - **Category:** D.
- **Working conditions:**
 - **Soil condition:** Reasonably dry and workable.
 - **Timing:** Within a few days before planting.
 - **Weather and ground conditions:** Suitably dry.
- **Compacted topsoil:** Break up to full depth.
- **Soil with root spread of trees and shrubs to be retained:** Do not dig or cultivate.
- **Surface:**
 - **Contours:** Smooth and flowing, with falls for adequate drainage.
 - **Hollows and ridges:** Not permitted.
- **Remove visible weeds, roots and large stones with any dimensions exceeding:** 50 mm.
- **Adjacent levels:** Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
- **Give notice:** If required levels cannot be achieved by movement of existing soil.

40-35-35/623 Finished levels of topsoil after settlement

- **Height (maximum) above adjoining paving or kerbs:** 20 mm.
- **Height below dpc of adjoining buildings (minimum):** 150 mm.
- **Height of shrub areas (maximum) above adjoining grass areas:** 50 mm.
- **Height above adjoining lawns:** 50 mm.
- **Within root spread of existing trees:** Unchanged.
- **Adjoining soil areas:** Marry in.

40-35-35/624 Setting out of seeded and turfed areas

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

40-35-35/641 Turfing generally

Shared by: 40-35-35/643 Turfing on banks exceeding 30° slope; and 40-35-35/645 Trimming turf around trees.

- **Conditions:**
 - **Time of year:** Carry out the work while soil and weather conditions are suitable.
 - **Restrictions:** Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry.
- **Timing of laying:**
 - **Spring and summer:** Within 18 h of delivery.
 - **Autumn and winter:** Within 24 h of delivery.
- **Working access:** Planks laid on previously laid turf. Do not walk on prepared bed or newly laid turf.
- **Jointing:** Laid with broken joints, well butted up. Do not stretch turf.
- **Edges:** Whole turfs, trimmed to a true line.
- **Levels adjustment:** Remove high spots and fill hollows with fine soil.
- **Consolidating:** Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers.
- **Dressing:**
 - **Method:** Brush well in to completely fill all joints.
 - **Mix:** 35% finely sifted topsoil, 35% compost, 30% sand.
- **Watering:** Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

40-35-35/643 Turfing on banks exceeding 30° slope

- **General requirements:** 40-35-35/641 Turfing generally.
- **Turf configuration:** Diagonal or horizontal.
- **Securing turfs:**
 - **Frequency of fixings:** Every second row.

40-35-35/645 Trimming turf around trees

- **General requirements:** 40-35-35/641 Turfing generally.
- **Method:** Neatly cut away around individual trees.
- **Diameter (nominal):** 1000 mm.
- **Tree pit surface:** Re-spread existing mulch.

45-40-95/603 Certification of turfs

- **Standard:** To Turfgrass Growers Association (TGA) quality standards.

45-40-95/609 Handling, storage and transport of turf

- **Timing:** Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist.
- **Frosty weather or waterlogged ground:** Do not lift turf.
- **Delivery to site:** Arrange to avoid need for excessive stacking.
- **Stacking height (maximum):** 1 m.
- **Dried out or deteriorated turf:** Do not use.

System completion

40-35-35/801 Grass sward maintenance up to practical completion

Shared by: 40-35-35/811 Watering grass swards; 40-35-35/813 Applying top dressing; 40-35-35/851 Grass swards first cut; and 40-35-35/853 Cutting amenity grass.

- **Visits to site to inspect grass swards:**
 - **Notice:** Give notice before visiting site up to practical completion
 - **Period of notice:** 1 week.

40-35-35/802 Grass sward maintenance up to the end of the rectification period

Shared by: 40-35-35/811 Watering grass swards; 40-35-35/813 Applying top dressing; 40-35-35/851 Grass swards first cut; and 40-35-35/853 Cutting amenity grass.

- **Visits to site to inspect grass swards:**
 - **Notice:** Give notice before visiting site up to practical completion
 - **Period of notice:** 2 working days.

40-35-35/803 Failures of seeding and turfing

- **Defective materials or workmanship:** Areas that have failed to thrive.
- **Exclusions:** Theft or malicious damage.
- **Method of making good:** Re-cultivation and re-seeding/ re-turfing.
- **Timing of making good:** The next suitable planting season.

40-35-35/811 Watering grass swards

- **General requirements:** 40-35-35/801 Grass sward maintenance up to practical completion and 40-35-35/802 Grass sward maintenance up to the end of the rectification period.
- **Quantity:** Wet full depth of topsoil.
- **Application:** Even and without displacing seed, seedlings or soil.
- **Frequency:** As necessary to ensure the establishment and continued thriving of seeding and turfing.

40-35-35/813 Applying top dressing

- **General requirements:** 40-35-35/801 Grass sward maintenance up to practical completion and 40-35-35/802 Grass sward maintenance up to the end of the rectification period.
- **Locations for application:** Amenity grass.
- **Application:**
 - **Spreading:** Evenly on surface, in transverse directions.
 - **Timing:** Start of growing season.
 - **Application rate:** 5-10mm depth layer.

40-35-35/851 Grass swards first cut

- **General requirements:** 40-35-35/801 Grass sward maintenance up to practical completion and 40-35-35/802 Grass sward maintenance up to the end of the rectification period.
- **Timing:** When grass is reasonably dry.
- **Height of initial growth (nominal):** 40–75 mm.
- **Preparation:**

- **Debris and litter:** Remove.
- **Stones and earth clods larger than 25 mm in any dimension:** Remove.
- **Height of first cut (nominal):** 40 mm.
- **Mower type:** Cylinder.
- **Arisings:** Remove.

40-35-35/853 Cutting amenity grass

- **General requirements:** 40-35-35/801 Grass sward maintenance up to practical completion and 40-35-35/802 Grass sward maintenance up to the end of the rectification period.
- **Height of growth at any time (maximum):** 100 mm.
- **Preparation:** Before each cut remove litter and debris.
- **Cutting:**
 - **Timing:** As and when necessary.
 - **Height (nominal):** 50 mm.
 - **Arisings:** Spread evenly over cut areas.
- **Trimming:** All edges.
- **Arisings:** Remove.

Ω End of system

9015-012

Amenity grass maintenance system

22/06/2015 - 14:55

40-35-35/190 Amenity grass maintenance system

System outline

40-35-35/190 Amenity grass maintenance system

- **Spot weedkilling herbicide:** 45-40-05/343 Selective herbicides.
- **Seed mix:** To match original specification
- **Top dressing:** 45-40-85/410 Compost dressing.
- **System facility management:** 40-35-35/901 Grass sward management objectives;
40-35-35/903 Cleanliness when maintaining grass swards;
40-35-35/911 Watering grass swards;
40-35-35/912 Water restrictions during grass sward maintenance;
40-35-35/921 Weed control on grass swards generally;
40-35-35/922 Applying selective herbicide to grass swards;
40-35-35/933 Applying top dressing;
40-35-35/942 Maintaining grassed areas with bulbs;
40-35-35/945 Maintenance of grassed areas;
40-35-35/949 Re-forming grass edges;
40-35-35/950 Reinstatement of damaged lawns;
40-35-35/952 Leaf removal from grass swards;
40-35-35/961 Grass cutting generally;
40-35-35/962 Mowing general areas;
40-35-35/969 Protecting tree stems in grass swards;
40-35-35/976 Soil aeration for grass swards;
40-35-35/977 Levelling hollows and bumps in turf;
and 40-35-35/978 Relieving surface compaction in turf.

Products

45-40-05/343 Selective herbicides

Shared by: 40-35-00/135 Grass-planted bulb and wildflower system; and 40-35-35/190 Amenity grass maintenance system.

- **Manufacturer:** Contractor's choice.
- **Third party certification:** Manufactured under a quality system complying with BS EN ISO 9001 and Pesticide Safety Directorate.
- **Target weeds:** Perennial weeds;
Perennial weeds in grassed areas;
and Grass weeds in lawns.
- **Active ingredient(s):** Manufacturer's standard.
- **Carrier:** Water.
- **Pack size (minimum):** Manufacturer's standard.
- **Additional active ingredients:** Manufacturer's standard.
- **Execution:** 45-40-05/601 Application of selective herbicides.

45-40-85/410 Compost dressing

Shared by: 40-35-35/185 Turf planting system; and 40-35-35/190 Amenity grass maintenance system.

- **Supplier:** Submit proposals.

- **Source:** Contractor's choice.
- **Compost type:** Sanitized and stabilized compost
- **Standard:** To PAS 100.
- **Horticultural parameters:**
 - **pH (1:5 water extract):** max 7.0.
 - **Electrical conductivity (maximum, 1:5 water extract):** 200 S/m.
 - **Moisture content (m/m of fresh weight):** 35–55%.
 - **Organic matter content (minimum):** 25%.
 - **Grading (air dried samples):** 100% passing screen mesh aperture of 5 mm.
 - **Carbon:Nitrogen ratio (maximum):** 20:1.
- **Texture:** Friable.
- **Objectionable odour:** Not permitted.
- **Declaration of analysis:** Submit.
- **Additional analyses:** Chloride content - Max 800mg/l

Execution

45-40-05/601 Application of selective herbicides

- **Target weeds:** All weeds.
- **Application rate:** Contractor's choice.
- **Timing and frequency:** Contractor's choice.
- **Areas not to be sprayed:** Bulb and corm planted areas when in leaf.
- **Disposal of arisings:**
 - **Timing:** Allow recommended period for herbicide to take effect before clearing dead weeds.
 - **Operations:** Remove to contractor's tip.

System facility management

40-35-35/901 Grass sward management objectives

- **Duration:** 2 years.
- **Management outcomes:** Improved landscape visual amenity.
- **Results:** Strong root growth. Thriving, sustainable sward.

40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards

Shared by: [40-35-35/911 Watering grass swards](#); [40-35-35/912 Water restrictions during grass sward maintenance](#); [40-35-35/921 Weed control on grass swards generally](#); [40-35-35/922 Applying selective herbicide to grass swards](#); [40-35-35/933 Applying top dressing](#); [40-35-35/942 Maintaining grassed areas with bulbs](#); [40-35-35/945 Maintenance of grassed areas](#); [40-35-35/949 Re-forming grass edges](#); [40-35-35/950 Reinstatement of damaged lawns](#); [40-35-35/952 Leaf removal from grass swards](#); [40-35-35/961 Grass cutting generally](#); [40-35-35/962 Mowing general areas](#); [40-35-35/969 Protecting tree stems in grass swards](#); [40-35-35/976 Soil aeration for grass swards](#); [40-35-35/977 Levelling hollows and bumps in turf](#); and [40-35-35/978 Relieving surface compaction in turf](#).

- **Events requiring notification:**
 - **Inspections:**

Application of herbicide: 2 days.

Watering:

Each site maintenance visit: 2 days.

Grass cutting: 2 days.

Soil management: 7 days.

40-35-35/903 Cleanliness when maintaining grass swards

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

40-35-35/911 Watering grass swards

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Supply:** No site supply available.
- **Quantity:** Wet full depth of topsoil.
- **Application:** Do not damage or loosen plants.
- **Compacted soil:** Loosen. Direct water to rootzone.
- **Frequency:** As necessary for the continued thriving of all planting.

40-35-35/912 Water restrictions during grass sward maintenance

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Watering instructions:** 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.
For seeding/ turfing carried out before emergency legislation comes into force, obtain instructions on watering.

40-35-35/921 Weed control on grass swards generally

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Weed tolerance:**
- **Method:** Application of a suitable selective herbicide.
- **Stones brought to the surface:** Remove regularly any exceeding 25 mm in any dimension.
- **Areas of settlement:** Make good.
- **Adjacent plants, trees and grass:** Do not damage.

40-35-35/922 Applying selective herbicide to grass swards

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Areas not to be sprayed:** Bulb and corm planted areas when in leaf.

40-35-35/933 Applying top dressing

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Locations for application:** All grassed areas.
- **Application:**

- **Spreading:** Evenly on surface, in transverse directions.
- **Timing:** Spring. Following cutting of bulb areas
- **Application rate:** 10mm layer

40-35-35/942 Maintaining grassed areas with bulbs

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Preparation:** Before each cut remove litter and debris.
- **Height:** 50 mm.
- **Timing:** Do not cut before flowering.
Do not cut until bulb foliage has died down.
- **Interval between end of flowering and start of grass cutting (minimum):** Within 1 week, once the vegetation die back is complete.
- **Arisings:** Remove.

40-35-35/945 Maintenance of grassed areas

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **General:** Maintain turf in a manner appropriate to the intended use.
- **Soil and grass:**
 - **Condition:** Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - **Waterlogging and compaction:** Prevent.
 - **Damage:** Repair trampling, abrasion or scalping.
- **Litter and fallen leaves:** Remove regularly to maintain a neat appearance.

40-35-35/949 Re-forming grass edges

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Edges:** Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.

40-35-35/950 Reinstatement of damaged lawns

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Damaged turf:** Remove.
- **Depth (minimum):** 30 mm.
- **Preparation:** Cultivate substrate to a fine tilth.
- **Reinstatement: Contractor's choice of turfing or topsoiling and reseeding::**
 - **Returfing:** Quality and appearance to match existing.
 - **Reseeding:** Fill with fine topsoil to BS 3882 multi-purpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
- **Protection and watering:** Promote successful germination and/ or establishment.

40-35-35/952 Leaf removal from grass swards

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Operations:** Collect fallen leaves.

- **Disposal:** Remove from site for recycling.

40-35-35/961 Grass cutting generally

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Before mowing:** Remove litter, rubbish and debris.
- **Finish:** Neat and even, without surface rutting, compaction or damage to grass.
- **Edges:** Leave neat and well defined. Neatly trim around obstructions.
- **Adjoining hard areas:** Sweep clear and remove arisings.
- **Drought or wet conditions:** Obtain instructions.

40-35-35/962 Mowing general areas

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Grass height:** 25–50 mm.
- **Arisings:** Spread evenly over cut areas.

40-35-35/969 Protecting tree stems in grass swards

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **General:** Do not damage bark.
- **Mowing machinery:** Do not use closer than 100 mm to tree stems..
- **Nylon filament rotary cutters and other hand held mechanical tools:** Do not use closer than 100 mm to tree stems.
- **Operations close to stems:** Complete using hand tools.

40-35-35/976 Soil aeration for grass swards

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Compacted soil surfaces:**
 - **Prick up:** To aerate the soil of root areas and break surface crust.
 - **Size of lumps:** Reduce to crumb and level off.
 - **Damage:** Do not damage plants and their roots.

40-35-35/977 Levelling hollows and bumps in turf

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Standard:** To BS 7370-3.

40-35-35/978 Relieving surface compaction in turf

- **General requirements:** 40-35-35/902 Notice to inspect and carry out maintenance operations on grass swards.
- **Standard:** To BS 7370-3.
- **Method:** Spiking.
- **Top dressing:**
 - **Depth:** 2–5 mm.

Ω End of system

9015-012

Sub irrigation system

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55-40-50/170 Sub irrigation system

System outline

55-40-50/170 Sub irrigation system

- **System performance:** To allow efficient watering of trees during establishment. Installation required for all specimen trees and large shrubs
- **System manufacturer:** GreenBlue Urban Ltd
- **System reference:** RRUrb2A

Ω End of system