



LEGEND

- RED LINE / SITE BOUNDARY
- EXISTING TREES / VEGETATION

Planting Strategy

- EXISTING WOODLAND
- NATIVE SHRUB / HEDGEROW PLANTING
 - Acer campestre (15%)
 - Corylus avellana (10%)
 - Crataegus monogyna (10%)
 - Ilex aquifolium (10%)
 - Ligustrum vulgare (15%)
 - Malus sylvestris (5%)
 - Prunus spinosa (10%)
 - Rhamnus cathartica (10%)
 - Rosa canina (5%)
 - Viburnum opulus (10%)

- FEATURE TREE PLANTING
 - Carpinus betulus
 - Castanea sativa
 - Quercus robur
 - Tilia cordata

- SUPPLEMENTARY TREE PLANTING
 - Pinus sylvestris
 - Populus tremula
 - Prunus avium

- OTHER TREE PLANTING
 - Acer campestre
 - Sorbus aucuparia

- GRASS / MEADOW SEEDING

- MOWN GRASS FOOTPATH

Hard Surfacing Materials

- EXISTING MACADAM SURFACE
To be retained and made good.
- EXISTING GRAVEL SURFACING
To be retained and made good.
- GEO-GRID PAVING WITH PEA SHINGLE
By REVIVE Recycled Plastics or similar and approved.

Street Furniture & Infrastructure

- TIMBER BENCH
- TIMBER PICNIC BENCH
- LITTER BIN
- CYCLE STAND
- TIMBER KNEERAIL FENCING
- SLATTED PRIVACY SCREEN
- VEHICLE BARRIER ENTRY
Three-way barrier system with built in Automatic Number Plate Recognition (ANPR) cameras
- SPEED BUMPS
- LOCKABLE TIMBER BOLLARD

1:250



A	28/01/20	LR	Amendments to proposals following further consultation with client
Rev	Date	By	Description

DRAWING STATUS FOR PLANNING

Client	TARMAC A CH2M COMPANY
Project	Panshanger Lane Car Park, Panshanger Park
Title	Landscape Plan
Scale	1:250@A1
Date	September 2020
Drawing No.	MH7420-005
Checked	JC/JP
Rev	-

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Credit: Goose Foot Street Furniture

Proposed cycle storage



Credit: geograph.org.uk (Michael Trolove)

Proposed location of horse box cafe facilities

Proposed toilet block
Please refer to drawings by
Malcolm Payne Group Ltd

Electricity substation

Retaining wall with concrete edging to
create informal seating



Credit: Milbank Group Ltd (Castle Hill Development)



Credit: geograph.org.uk (David Hawgood)

PLANTING SPECIFICATION

General Guidance

All plant handling to be in accordance with the HTA 'Handling and establishing landscape plants' Part I, Part II and Part III (obtainable from the Horticultural Trades Association) and the CPSE publication: 'Plant Handling' and all planting to conform to National Planting Specification Guidelines.

The individual setting-out of the plants on site shall be the responsibility of the contractor and should follow closely the locations shown on the detailed planting proposal drawings supplied by the landscape architect. Contractor to ensure that plants are equally spaced within individual planting groups.

Contractor to ensure that smaller plants are located to the front of plant species groups as shown on detailed planting plans.

Contractor shall maintain existing levels around the base of existing trees and shall undertake all planting works occurring within root protection areas (RPA) in accordance with BS5837:2012. Contractor shall not remove or relocate any tree protection fencing without prior consent of the client.

Contractor to check the locations of all underground services, existing and proposed, prior to the excavation of any tree pits or shrub beds and identify any potential conflicts to the client / landscape architect.

All arisings shall be removed from site and the contractor shall at all times, keep the site free from rubbish and debris.

For the duration of the works the contractor shall keep the site free from injurious weeds as listed in the Weeds Act 1959.

All plants should be supplied at the same size and of the same species as specified in the planting schedules on the landscape proposals plan. Any proposed replacement species or deviation from the planting schedules should be highlighted to and agreed with the client prior to installation.

All plants shall be hardened-off at the Contractor's own nursery or at the source prior to planting out.

All field grown and rootballed trees must have been transplanted or underlaid in the nursery no less than 18 months prior to supply.

The Contractor shall carry out the work while soil and weather conditions are suitable. Planting is not to take place during periods of frost or strong winds.

The contractor is to ensure that adequate watering and weed control is provided at the time of planting.

Any topsoil retained on site in stockpiles for use in planting works is to be stored in accordance with the DEFRA publication: 'Code of practice for the sustainable use of soils on construction sites'

Do not use peat or peat based products.

Prior to planting, planting areas shall be cleared of grass and weed growth physically and/or chemically with a proprietary translocated herbicide and a period of time shall be allowed to elapse as recommended by the manufacturer before commencement of soil preparation for planting.

All plants are to be watered thoroughly before planting stage to ensure rootballs are thoroughly soaked prior to final backfilling.

Tree Planting

Generally plant trees in pits with minimum dimensions of:

- 1000 x 1000 x 700-800mm deep for trees in soil, planted areas including grass/shrub areas and rear gardens.

Backfill the pits in layers as specified below (from bottom up):

Drainage layer

- 200mm layer of compacted inert free draining gravel or pea shingle, wrapped in geo-textile membrane
- 100mm layer of washed medium-course sand to act as leaching layer between geotextile and soil.

Topsoil layer

- 400-500mm layer of retained site-sourced topsoil (free from weeds) or imported topsoil (Multi-purpose grade to BS3882:2015; sandy loam); depth dependent on size of rootball.

Depth of topsoil should only be as deep as the rootball of proposed tree to a max. depth of 400-500mm. Should the rootball be larger i.e. 800mm height, then the pit should be increased in depth to suit, but with the difference in depth from the 400-500mm topsoil layer and the drainage layer made up of quality imported free-draining subsoil to BS5861:2013 to avoid topsoil occurring at depths of greater than 500mm.

Likewise, for smaller trees i.e. feathered trees, with more limited rootballs/bare root, the depth of topsoil can be reduced to reflect the surrounding topsoil depths or to a max. topsoil depth of 350mm, with a further layer of site-sourced or imported subsoil (to BS5861:2013) below to create a total depth of good medium of between 400-500mm i.e. 150-200mm layer of subsoil. Drainage layer should remain as above.

As stated above, the min. pit size for trees planted in newly created planting areas should be 1m x 1m, however where planting is occurring in clean, undisturbed ground, pits should be dug to approx. 200mm greater than the rootball to limit distribution of surrounding soil structure.

Break up bottom of tree pit to a depth of 200mm and ensure ground is free-draining. Loosen edges of tree pit at time of planting by hand, using a fork to ensure good drainage. Pits should be excavated no greater than 48hrs prior to planting and de-watered as required.

Incorporate a soil conditioner/ameliorant in the form of peat-free tree and shrub compost or well rotted spent mushroom compost or 'Tiscobuster' by GreenTech Ltd (01423 332100) into backfilled topsoil material at the rate of min. 4Ll per pit.

Incorporate soil improver 'Terracotam Anchor' by GreenTech Ltd (01423 332100) at a rate of 1kg per pit, mixed thoroughly into backfilled topsoil.

Backfill topsoil mix in layers of 150mm, firming at each layer and leaving the pit sides to aid drainage. The surface level of the pit should be 50mm above the surrounding ground.

Trees shall be planted in the centres of the excavated pits.

Trees in soft planted areas to be dressed with a minimum 75mm mulch layer, consisting of pine bark fines, particle size 15-50mm to a min. diameter of 1000-1200mm where appropriate.

Standard trees shall be staked and supported with a low, single stake consisting of 1No. 75mm diameter x min. 2000mm length, rounded timber post driven into the ground at 45 degree angle to approx. 450mm above ground level and fixed to the tree by a proprietary rubber tree tie.

Trees shall be installed with proprietary flexible perforated irrigation/ventilation pipe with integral cap. Pipe to be installed encircling equally around rootball to the full depth of planting pit, with the final cap section installed just above ground level and nailed securely in place to the adjacent timber stake.

All trees in grass areas to be protected by min. 225mm high x 12-15mm diam. proprietary plastic strimmer/voile guards. Where trees have a basal trunk diameter greater than 12mm e.g. semi-mature, then two or more guards should be joined together using joining tape and then secured in place.

Root Barrier Membranes

Where trees are proposed in close proximity to hard paved areas or proposed service runs, a root barrier membrane is to be installed as prescribed below:

For all proposed trees centred in a location within 3m of an adjacent hard standing/corner or camberway kerb line, a proprietary root barrier membrane is to be installed to protect the hard standing and any underground services located beneath from future damage by tree roots.

Root barrier membrane(s) to be installed on the tree side along the back edge of the kerb / edging restraint to the adjacent hard standing and are to extend a minimum 3m in each direction from a point taken perpendicular from the tree trunk to the kerb/edging face.

Root barrier membranes are to extend to a depth as outlined below:-

- For trees adjacent to hard standings only (no underground services): install 'Reroc 300' by GreenBlue Urban (01424 717797) or equal and approved, ribbed root barrier membrane, to a depth of 300mm, rib facing tree, joints fixed with joining tape, install 10mm above final surface level of soft landscaping.
- For trees adjacent to hard standings incorporating underground services: install the following dependant on the depth of underground services;
 - For services 450mm deep
 - 'Reroc 607' by GreenBlue Urban (01424 717797) or equal and approved, ribbed root barrier membrane, to a depth of 600mm, ribs facing tree, joints fixed with joining tape, install 10mm above final surface level of soft landscaping.
 - For services 800mm deep
 - 'Reroc 1000' by GreenBlue Urban (01424 717797) or equal and approved, ribbed root barrier membrane, to a depth of 1000mm, ribs facing tree, joints fixed with joining tape, install 10mm above final surface level of soft landscaping.
 - 'Reroc 2000' by GreenBlue Urban (01424 717797) or equal and approved, ribbed root barrier membrane, to a depth of 2000mm, ribs facing tree, joints fixed with joining tape, install 10mm above final surface level of soft landscaping.

For locations where a hard standing with or without underground services exists on both sides of the tree e.g. grass verge, then a root barrier is to be installed against both kerb / edging faces.

For trees located within hard surfaces themselves i.e. surrounded by hard paved surfaces, install 'Root Director' by GreenBlue Urban (01424 717797) or equal and approved, ref. RD1400; 1400mm x 1400mm x 450mm, plastic root director with integral ribs.

Native Shrub / Hedgerow Planting

Generally clear any surface vegetation in proposed shrub and hedgerow areas, utilizing proprietary herbicide where appropriate and install plants into isolated pre-prepared planting pits, generally 300 x 300 x 450mm deep or 200mm greater than the rootball, whichever is greater, backfilling with either existing retained site sourced topsoil (free from weeds) or imported topsoil (sandy loam). General Purpose grade to BS3882:2015) or a combination of the two as necessary.

Incorporate a soil conditioner / ameliorant in the form of peat free tree and shrub compost or well rotted spent mushroom compost into backfill material at the rate of 5L per pit, incorporating a slow release fertiliser e.g. Etnag (or similar approved) at a rate of 5g per pit.

Ensure planting conforms to planting matrix where appropriate and in all other areas appears random / natural and not formal in accordance with the planting proposal layouts.

Plant Protection

Where rabbits are a known issue, all native shrub / hedgerow areas are to be fully enclosed by min. 800mm high rabbit proof fencing, supplied as min. 19 Gauge (1.2mm) galvanised mesh with max. 31mm openings, nailed with galvanised 20mm staples to 50-75mm diameter treated timber stakes at 1.5m centres, incorporating 2No. horizontal galvanised straining wires. Mesh fence to be heeled into ground 150mm below ground level. Straining posts of 100mm diam. timber should be installed every 50m or at every turn of direction 90 degrees or greater.

If additional deer protection fencing is required, all native shrub / hedgerow areas are to be fully enclosed by min. 1.6m proprietary plastic mesh fencing (50mm x 45mm gauge) secured to min. 100mm rounded, treated softwood posts, driven min. 750mm below ground level at 3.5m centres. Mesh fence to be heeled into ground 150mm below ground level. NB: In areas where rabbits are also a known problem, an additional 300mm high section of min. 19 Gauge galvanised mesh (chicken wire) with max. 31mm openings is to be fixed to the lower portion of the deer fencing and attached using proprietary plastic cable ties.

All standard trees in the native shrub / hedgerow areas to be protected by min. 225mm high x 12-15mm diam. proprietary plastic strimmer/voile guards.

All small / feathered trees within native shrub / hedgerow areas to be protected by min. 1200mm high x 80-100mm diam. proprietary plastic mesh tree guard/shelter and secured in place with min. 25mm square treated softwood timber stake and fixed with plastic cable ties. NB: Should red or fallow deer reside in the locality the tree guard/shelters should be increased in height to 1.8m.

All coniferous trees within native shrub / hedgerow areas must only be protected by open mesh tree guards.

All bushy native shrubs / hedgerow plants to be protected by min. 600mm high x 170-200mm diam. proprietary plastic mesh shrub shelters / guards and secured in place with treated softwood timber stake and plastic cable ties.

All single stem shrub / hedgerow transplants to be protected by min. 450mm high x 50mm proprietary plastic spiral guards secured with min. 12-14x x 900mm long bamboo cane.

All native shrub / hedgerow plants to be installed with a min. 500mm square, woven polypropylene mulch mat securely pegged in place.

Where native shrub / hedgerow areas are created from freshly cultivated ground i.e. not into the existing sward, then the planting area should be over-seeded with a proprietary meadow grass mix (AF mix by Germinal Seeds Ltd) at a rate of 35g/s m² between planting seasons.

Meadow Grass Seeding

Areas to be seeded are to be finely graded to bring to a uniform and even grade at the correct finished level and to remove all minor hollows and ridges. All stones and debris greater than 50mm in size to be removed and disposed of off-site.

Seeded areas are to consist of min. 150mm topsoil; either existing retained site sourced topsoil (free from weeds) or imported topsoil (Multi-purpose grade to BS3882:2015; sandy loam) or a combination of the two as necessary, overlying min. 150mm layer of clean, free-draining subsoil. Subsoil should be prepared as per shrub specification, ensuring full decompaction and free-drainage.

Unless otherwise stated, finished levels of seeded areas to be 30mm above adjoining paving and kerbs; 150mm below the top of adjoining buildings.

Final preparation of the seeded areas shall be carried out as to create a fine tilth surface suitable for seeding.

For amenity grass areas, a pre-seeding fertiliser shall be applied at a rate of 250g/ha approx. 7 days prior to seeding and rolled into top surface e.g. CrispRight Lawn Establishment fertiliser by Rollert Ltd, slow-release granular fertiliser; 7:10:10 NPK; or equal and approved by Landscape Architect.

The areas is to be seeded between April and October with approved grass seed mix, as specified in the planting schedules at the specified rate. Following seeding, areas are to be hand raked and lightly rolled.

The contractor shall take the necessary precautions to ensure all grass areas are protected throughout the establishment period, with the use of chestnut pale fencing where appropriate.

The contractor shall ensure that all seeded and turfed areas are watered fully at the time of installation to the full cultivated depth, and that sufficient subsequent watering is carried out to ensure healthy establishment of the grass sward.

Plant Sourcing

All plant and seed material will be UK sourced and grown. All plant material to be sourced from reputable suppliers with good biosecurity and phytosanitary procedures.

General Planting Maintenance

All soft landscape areas to be maintained to BS7370-4:1993.

Sufficient watering should be undertaken by the contractor to establish and maintain healthy plant growth.

The first cut / mow of all amenity grass seeded / turf areas should be undertaken when the established sward reaches 50mm in height down to a height of 25mm, after which all amenity grassed areas should be maintained at a nominal height of 25-30mm (March to October). All arisings are to be removed from site and composted.

The first cut / mow of all meadow and wet meadow (yellowflow) areas to be undertaken when the established sward reaches 50mm in height or weeds colonise to a height of 300mm (whichever is sooner), to a nominal height of 25mm.

For spring sown meadow/wet meadows, the second cut should take place about 8 weeks after sowing, after which establishing meadow should be cut monthly down to 100mm during the first growing season to control weed growth, after which all meadow grass areas should be cut twice annually (June and September), to a nominal height of 100mm, once any wildflowers have set seed.

For autumn sown meadow/wet meadows, the second cut should take place in April, after which establishing meadow should be cut monthly down to 100mm during the first growing season to control weed growth, after which all meadow grass areas should be cut twice annually (June and September), to a nominal height of 100mm, once any wildflowers have set seed.

All meadow arisings should be left lying for 48hrs before being removed from site and composted.

Meadow areas should be hand-weeded or spot spewed for any perennial weeds such as docks, nettles and ragwort.

All failed / defective plants identified within the first 5 years of installation should be replaced by the contractor at the soonest available planting season to ensure a continued coverage of growth. Replacement plants should be of the same species and specification of the failed specimens.

Bare areas and areas of dead grass which become apparent should be rectified by overseeding and/or turf re-installation at the soonest available planting season.

All amenity grassed areas and planting beds should receive an application of a proprietary slow release fertilizer twice yearly in the spring and the autumn.

All shrub planting and hedges shall be pruned at least twice per annum, removing dead or dying wood, to maintain a healthy, natural shape and promote good form.

All planting areas should be kept tidy and free from weeds, trimmings, debris and litter. Weeds should be removed by hand unless where it is unfeasible, whereby weeds can be treated by the application of a suitable proprietary herbicide.

NB: Herbicide usage to be limited to spray usage on calm days (no wind) and undertaken by suitably qualified operatives in accordance with current legislation.

Tree stakes, ties and guards should be checked annually for adjustment and/or replacement/removal as required.