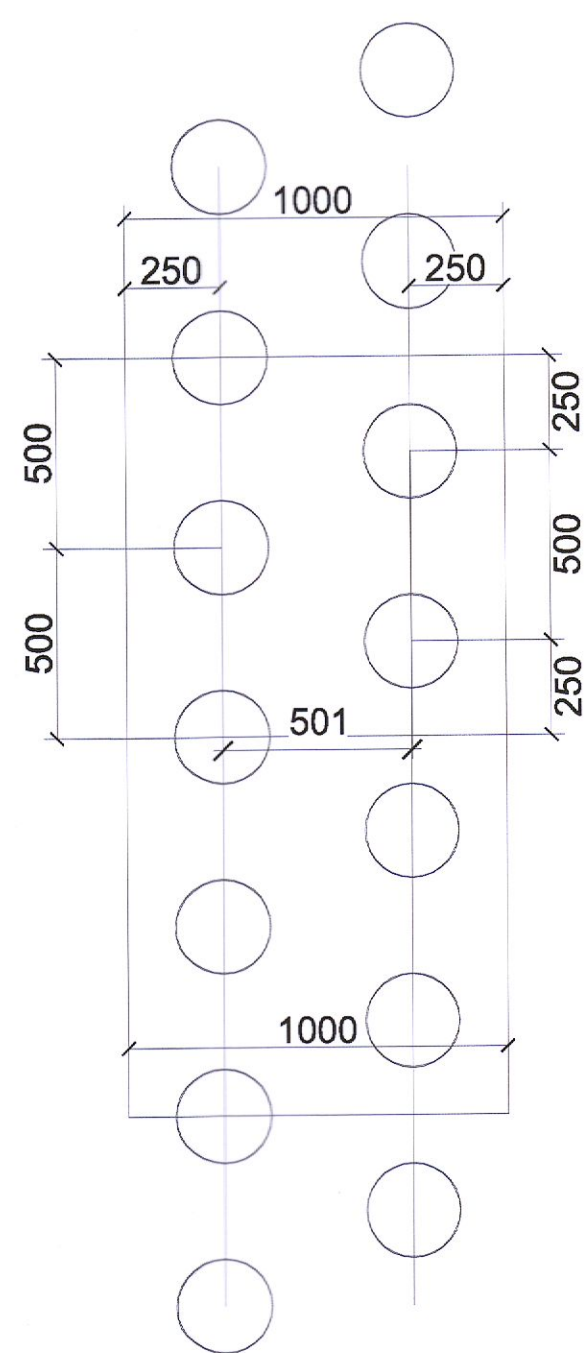


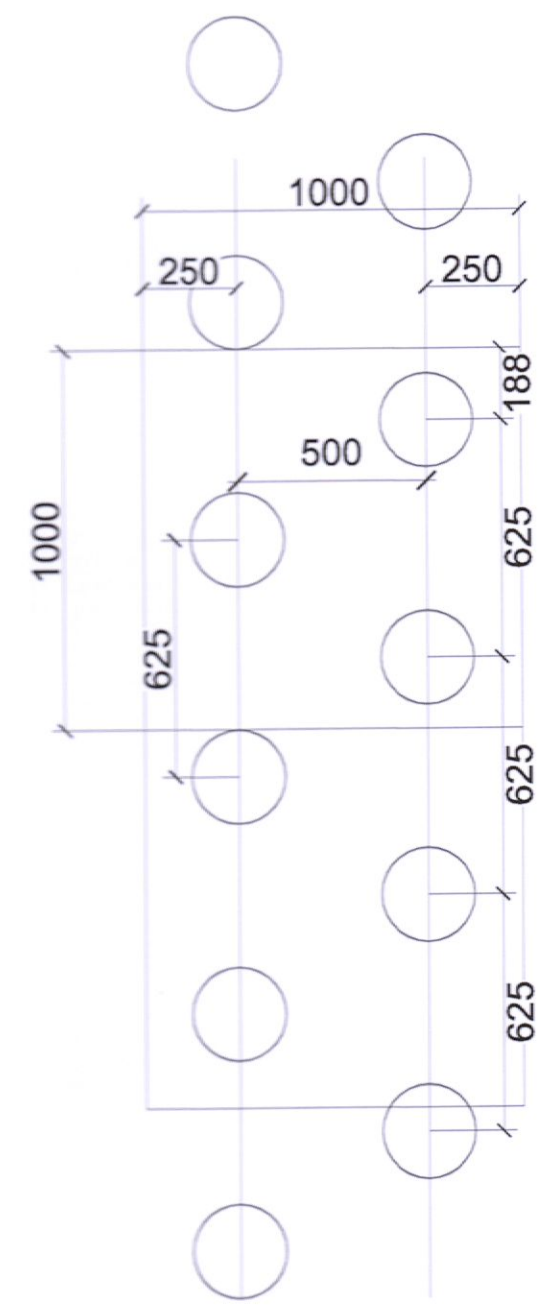
TREE PLANTING DETAIL A (clear or multi-stemmed trees)

- Q31/505 The tree pit should be excavated to allow adequate clearance between the root ends (when fully spread) and the side of the pit.
- Excavate the tree pit to 1200x1200x1000mm depth. Care is to be taken that soil removed from the pit does not damage existing landscape finishes (topsoil, mulch, plants, grass lawns etc); protection from foot damage is to be provided by the use of boards. Fork the bottom and sides of the pit to break up the sub-soil. Q31/586 Back-fill as shown to the level of the roots. Scarify pit sides, and ensure pit bottom is slightly raised.
- Q31/515 On heavy wet soils, provide a min 150mm depth of clean gravel or broken stone, with no fines, graded 40 to 20 mm with a geotextile filter membrane on top to aid drainage.
- Mix the dug soil with a slow-release fertiliser and an approved soil ameliorant.
- Stakes and rail to be half-round 150mm diameter planed finish. Drive in the stakes so that they are a minimum of 300mm below the bottom of the pit, and 650mm above the ground level. The stakes and rail are to be sweet chestnut or peeled larch poles, pointed at one end, preserved to resist rot for their intended lifespan, and strong enough to take galvanised screws without splitting.
- Plant the tree, ensuring that the original depth is maintained and the soil is carefully firmed back up to the existing ground level.
- Secure the rail to the stakes with 2 no. galvanised screws per stake.
- Secure the tree to the rail with 2 no. rainbow type rubber tree ties, screw-fixed to rails. Secure ties to allow for movement but to prevent damage to trunk.
- Q31/512 Install irrigation/ventilation pipe, woven coil pipe wrapped 1.5 times to encircle rootball with plastic cover cap. Watering filler cap to finish slightly above mulch level.
- Spread Q37/430 90gs/m² black non-woven geotextile landscape fabric over the back-filled topsoil (1200mmØ where tree is in lawn surfacing).
- Spread Q37/430 75mm depth medium-grade bark mulch over around the tree, and maintain it until the spring following the first growing season (1200mmØ where tree is in lawn surfacing).
- Protect the tree base and stem from damage by using a bamboo or hessian wrap tree guard to 2m height.
- The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (generally at the start of the third growing season after planting).
- Q31/510 wherever the installed rootball will be within 3.0 m of an existing underground service route and 2.0m of a building or paving foundation, install a tree pit root barrier, geotextile or cylinder type as appropriate. Top of root barrier to finish 75mm below finished soil level, installation with sides vertical.

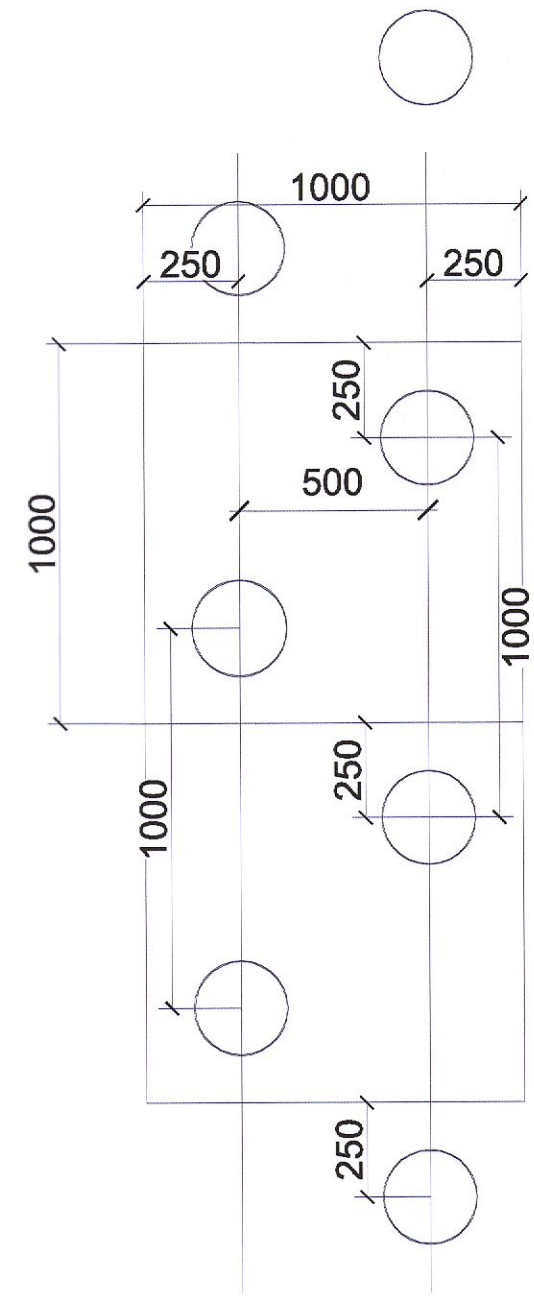
Planting Density: 4 per m²
All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



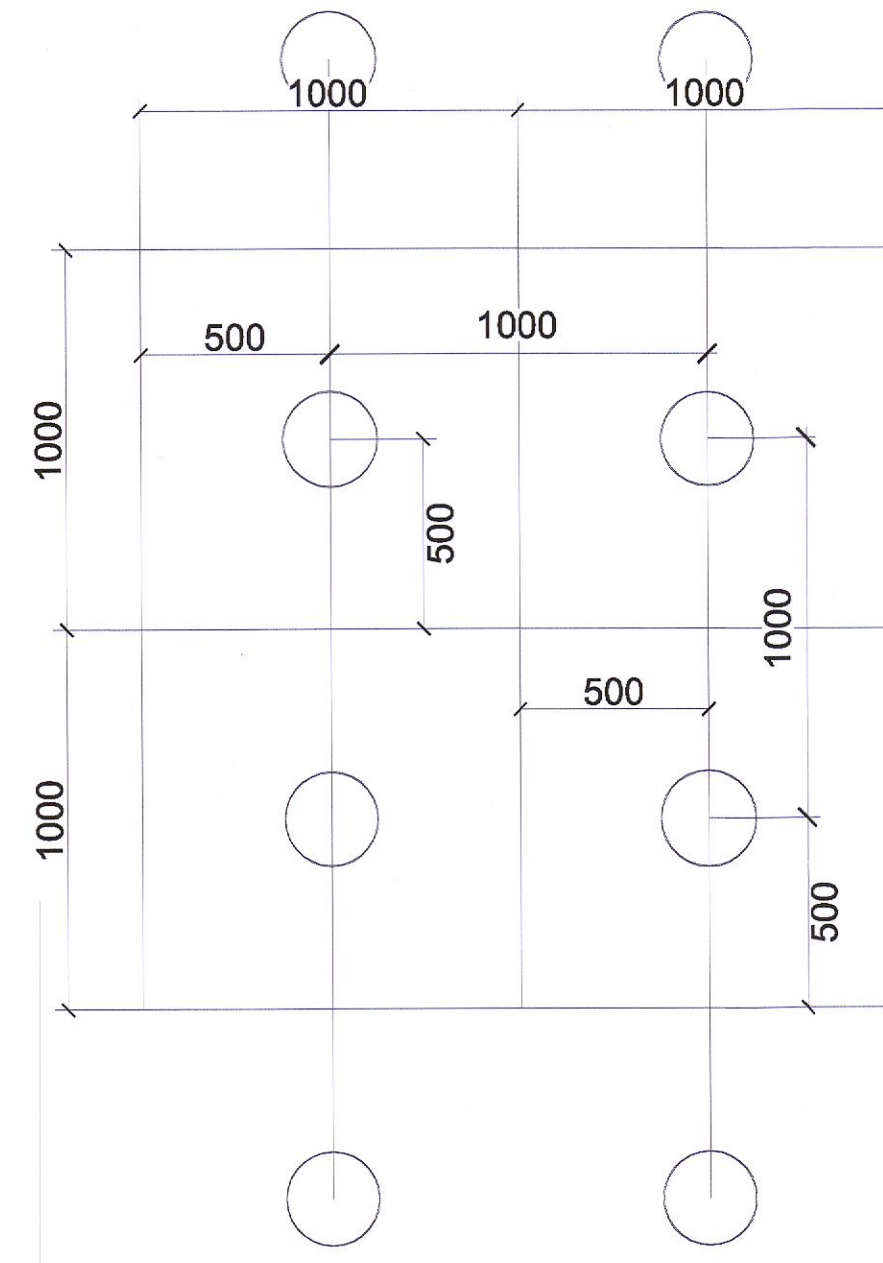
Planting Density: 3 per m²
All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



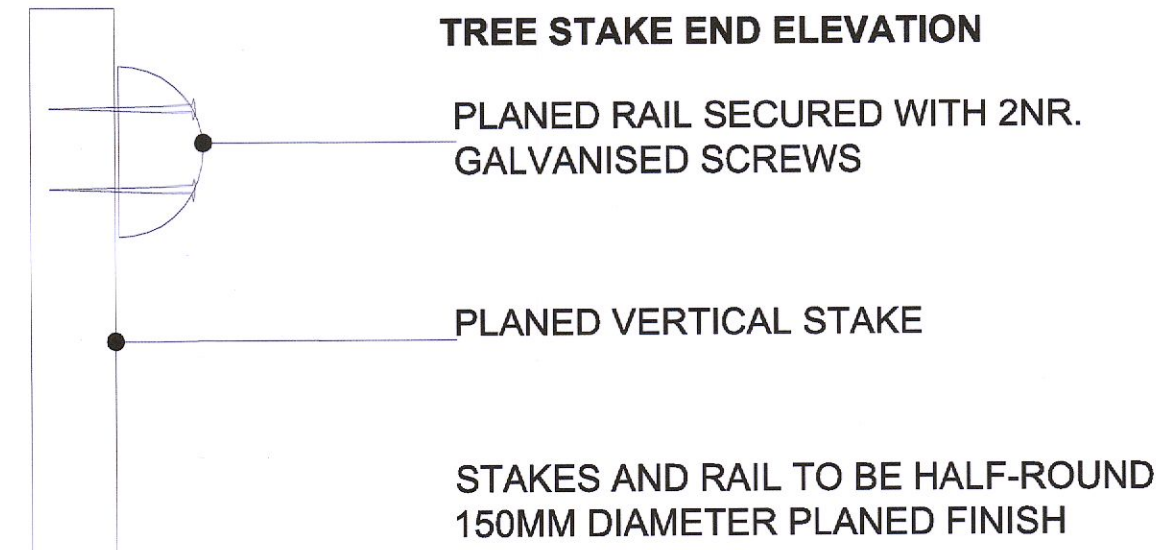
Planting Density: 2 per m²
All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



Planting Density: 1 per m²
All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



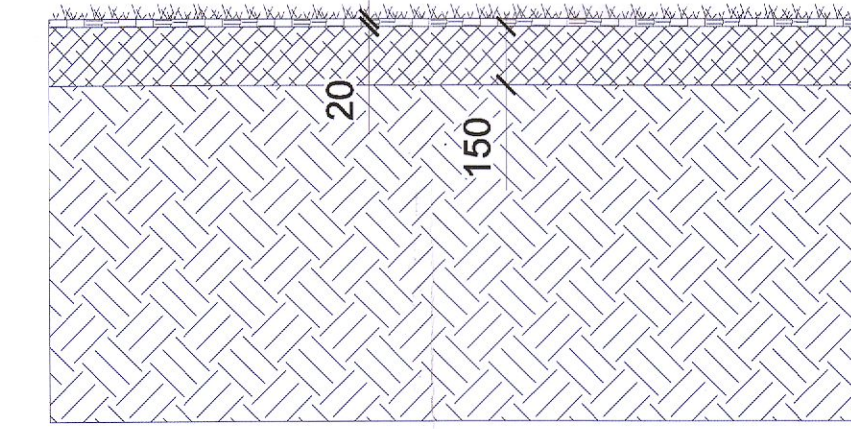
TREE STAKE END ELEVATION



SHRUB/TRANSPLANT PLANTING DETAIL

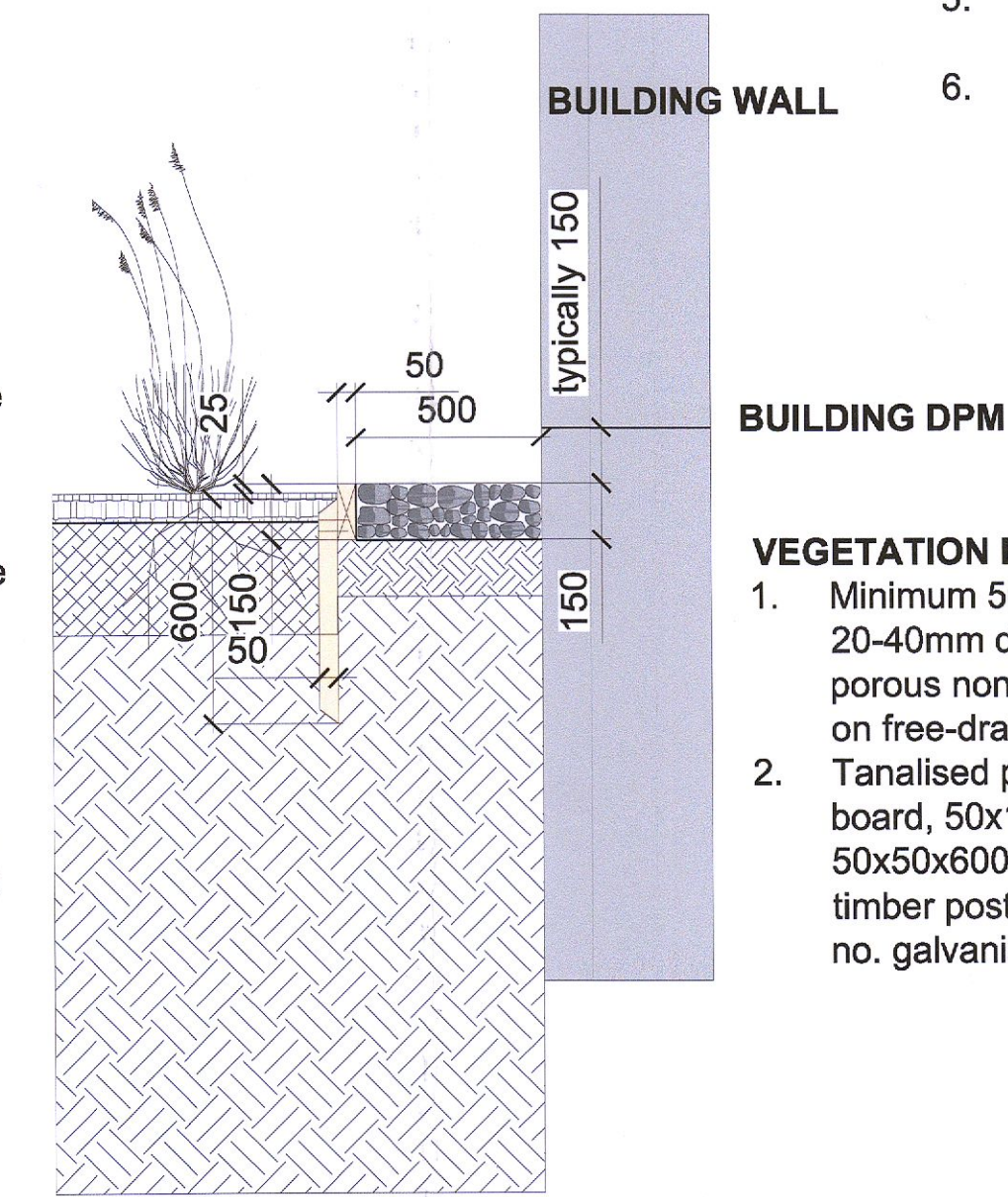
- All shrub/transplant planting beds to Q31/315 300/450mm depth of quality approved multi-purpose grade topsoil to BS: 3882 or as otherwise specified.
- Break up the soil in the base of each pit.
- Mix the dug soil with a slow release fertiliser and a specified soil ameliorant.
- Spread 90gs/m² black porous non-woven geotextile landscape fabric over the back-filled topsoil and secure with pins.
- Planting is to be carried out to the densities specified, through cuts in landscape fabric. Provide one single cut 300mm per length per plant. All 300mm cuts to follow in one direction along length of landscape fabric (cross-cutting not accepted).
- Once planted, back-fill with the remaining soil and firm as before.
- Top-dress the planting area with a Q37/430 75mm depth of medium-grade bark mulch, and maintain it until the spring following the first growing season. Mulch to finish 25mm below adjacent surfacing.

3 plants per m² or as otherwise specified



LAWN SURFACING DETAIL

- Excavate lawn areas to 125mm depth and break up base of lawn area to ensure free drainage.
- Q31/315 Back-fill with min. 150mm depth multi-purpose grade topsoil to BS:3882 to lawn areas.
- Seed bed: Reduce to fine, firm tilth with good crumb structure, depth: 25mm.
- Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods exceeding: general areas: 40mm, fine lawn areas: 10mm.
- Seed with Q30/310 grass seed mix or surface with Q30/410 turf as specified.
- Q30/428 Compost dressing, 20mm thick.



VEGETATION BARRIER AT BASE OF ELEVATIONS

- Minimum 500mm width of gravel aggregate 20-40mm diameter size on Q37/430 black 90gs/m² porous non-woven weed-guard type geotextile fabric on free-draining sub-base to engineer's detail.
- Tanalised pressure-treated larch timber edging board, 50x150mm variable lengths, secured with 50x50x600mm tanalised pressure-treated larch timber posts at 1200mm c/cs, fixed to edging with 2 no. galvanised screws 65mm long.

GENERAL NOTES

- Clearance:**
- All rubble, stone over 50mm, general rubbish and builders' debris to be cleared from the proposed planting areas and carried off site to an approved tip on prior to any excavation/cultivation works.
 - The planting area shall be treated with an approved herbicide. Any chemicals to be approved by the landscape architect and applied to manufacturer's instructions.

Site Preparation:

- Following herbicide treatment (duration depending on herbicide type) the entire area shall be cultivated to a medium tilth prior to topsoil being spread. All topsoil shall comply with the following:
 - All imported topsoil to be multi-purpose grade to BS:3882.
 - Soil shall have an acidity reading of between pH 8.0 and 7.0.
 - Stone content shall be over 5%, but not exceeding 20% stones by dry weight.
 - Minimum size of stone to be 20mm Ø on largest size.
 - Soil make-up: 16-27% clay; 0-70% sand; 20-40% silt and fibrous loam
- Topsoil to be free of grass, pernicious weeds and weed seed.
- After all topsoil spread and prior to planting to be cultivated to a medium tilth and then turned over to a minimum of 300mm. Incorporate an approved peat-free planting compost at a rate of 20LT/m² to a minimum depth of 100mm. Incorporate an approved slow-release granular fertiliser at the manufacturer's recommended rate.
- Topsoil to be spread to a minimum depth of 300mm to shrub and transplant planting areas and 150mm to grass seed bed.

Plant Material

- All plant material shall be pest and disease free.
- All planting to be carried out during the period of late October to March.

GENERAL NOTES (cont.)

Plant Material (cont.)

- All plants to be planted at the same depth as previously grown.
- Sufficient soil must be removed from the planting pit to allow the roots to fully spread. Care must be taken with root systems - with dry, damaged roots being carefully pruned.

Planting:

- (refer to Plant Schedule for species, sizes and planting densities)
- All shrubs to be pit-planted. General pit dimensions to be 300mm depth and back-filled with previously cultivated, excavated material. Back-filling to be done in layers of 150mm depth; at each stage the filling is to be firmly consolidated.
 - All trees to be pit-planted. Standard tree pits to be a minimum size of 1200x1200x1000mm. Semi-mature trees to agreed dimensions, dependent on rootball size. Remove the full depth of topsoil and set aside for re-use.

Mulching:

- All planting areas to receive a full even 75mm thickness of medium-grade pulverised bark mulch (or agreed alternative) graded from 40mm down to fine particles. During subsequent weeding/maintenance do not incorporate the mulch into the underlying soil. Care must also be taken against mulch becoming so dry as to become a fire hazard. If necessary, the areas must be dampened down.

Grass: (refer to Site Preparation Notes)

- Bring top 100mm of topsoil (see above) to a fine tilth, ensuring there are no stones over 25mm diameter.
- Spray areas with an approved herbicide at manufacturer's recommended rate.
- Incorporate an approved pre-seeding slow release granular fertiliser at 50g/m² and work into top 50mm of topsoil.
- Sow an approved low maintenance grass seed mix in two operations at a rate of 25gs/m² (350kh/Ha).
- Harrow and roll seed bed lightly after sowing.

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Client Department of Education and Skills

Project Clondalkin Adapt 18

Title Planting Details

Drng No 16-444-TD-04 Date Issued 2017-03-23 Scale 1:20 @ A1

Drawn LP Purpose Tender Checked SD