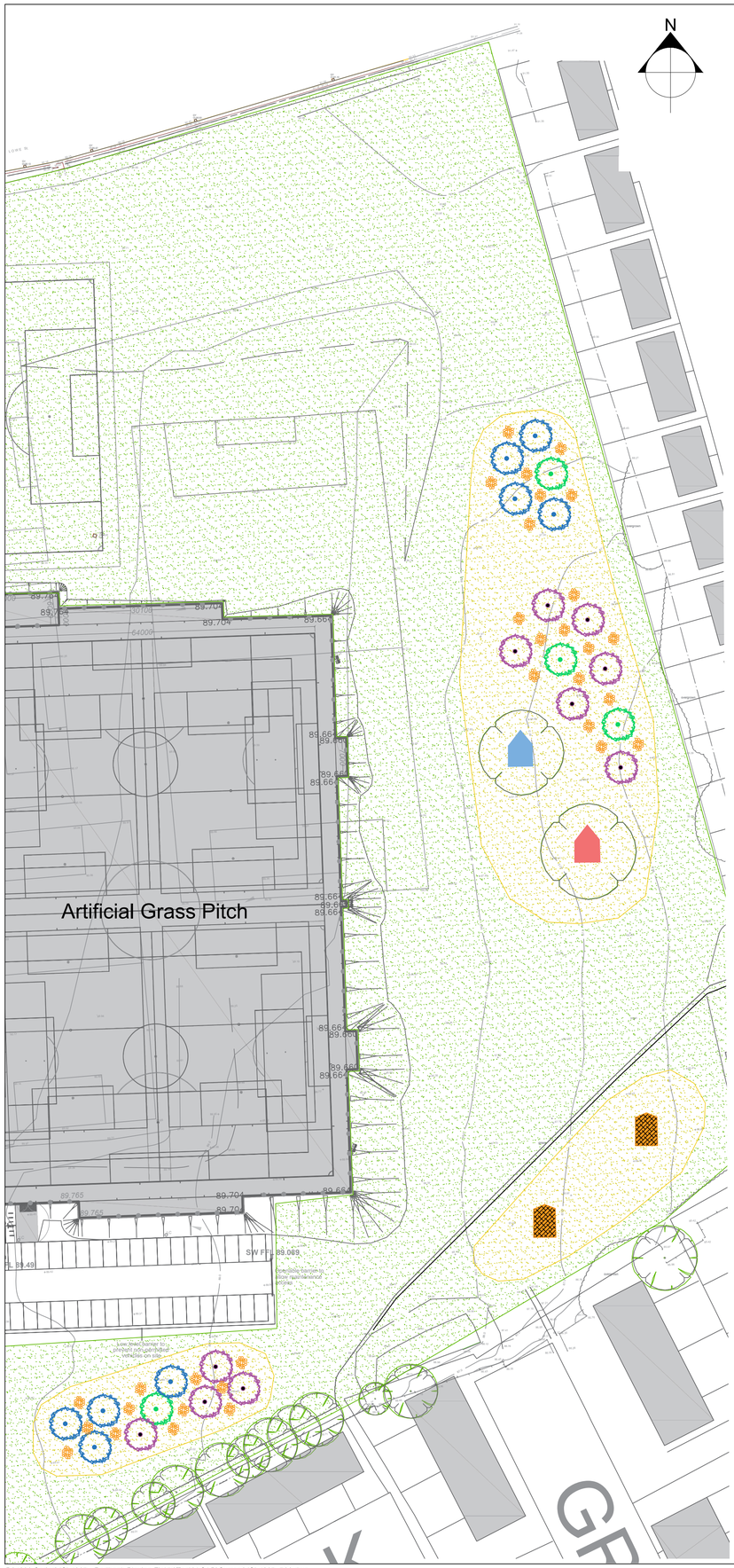


Individual Tree Planting Specification

Plant Handling at Site

Unloading and Temporary Storage

The contractor shall ensure that the young trees from the nursery are unloaded from the lorries/vans in a speedy and efficient manner. A full quality check should take place at the time of unloading. Any defects or breakages should be reported to the dispatching nursery immediately. Trees that do not meet the specification or are otherwise unsatisfactory or damaged should be rejected and returned, to avoid unnecessary failures in the planting process.

Any rootballed or containerized trees (if used) shall be lowered intact from the delivery vehicle and shall not be dropped onto the ground, as this can cause damage to the root system.

The time that trees are held in temporary storage should be kept to a minimum. The storage area should be specific for that purpose. The site should be isolated from areas where there is the potential for contamination from other stored materials on neighboring sites or damage from vehicles.

Planting Considerations

Considerations Below Ground

The planting pit positions for the trees and shrubs within the site will be reviewed by the contractor and any issues reported to the site manager for discussion with the client. Adjustments to the number of trees and shrubs or their arrangement within the site may be required.

When digging the pit the base of the planting pit should remain undisturbed unless there are specific problems such as poor drainage, soil smearing or pans resulting from pit construction which need to be rectified.

The backfill medium used should be as close as possible in texture and structure to the soil excavated from the planting pit. Ideally the soil dug from the excavated pit should be used as the backfill medium.

Topsoil should not be used below the depth of the original topsoil layer.

The base of the planting pit should be uncompacted and may need to be broken up by a spade to aid in root penetration and irrigation of the newly planted stock.

Considerations Above Ground

STANDARD TREES: After placing the tree within the dug pit, a spiral guard should be placed around the stem to protect from browsing animal damage (particularly rabbits). These guards should be of the design seen in the 'Tree Protection Design' to the right, consisting of plastic spiral guards. All guard/shelter products used must be biodegradable or recyclable and sustainably sourced.

The standard trees should be secured with a wooden stake, driven into the ground at a 45 degree angle to avoid the rootball and secured at a stem height no higher than $\frac{1}{3}$ with a tie.

SHRUBS: After placing the shrub within the dug pit, a plastic strimmer guard should be placed around the shrub to protect from strimmer and mower damage as well as pesticide damage from adjacent spraying activities. These guards should be of the design seen in the 'Tree and Shrub Protection Design' to the right.

The length of time for which these guard systems are left in place should be assessed during the initial and on-going maintenance of the landscape area. All support systems should be removed as soon as possible.

Mulches are beneficial to transplanting success and should be used. The root flare and the base of the stem should be maintained free from mulch. The tree should be irrigated before mulch is applied. A mulch depth of 50 mm to 100 mm is required. The mulch should be an organic based material such as composted bark or similar.

Planting The Trees and Shrubs

NOTE Planting depth is critical to transplanting success. Planting too deep is often identified as a common cause of failure. The root flare of the newly planted tree should be clearly visible at the soil surface. It should not be buried by excess soil or mulch. Where root flare should be revealed at the time of planting.

Any minor branch damage should be removed by pruning, ensuring that any branch removal does not include the branch collar attachment, adhering to best practice specified in BS3998:2010.

At no time should trees at the planting site be left with their root systems exposed or be vulnerable to drying out.

The planting pit should be no deeper than the existing rootball or container depth.

Tree pit sides should not have compacted, glazed or smeared sides from digging. Sides of a planting pit that have been smeared or smoothed during excavation should be scarified.

Tree pits should have a diameter at least 75 mm greater than that of the root system.

During excavation of the tree pit the soil dug should be placed to one side separating topsoil and subsoil as far as is practical.

The tree's root system should be wetted prior to planting.

The tree should be planted at the correct depth taking into account the position of the root flare and the finished level. Allowance should be made for settling of the soil after planting.

Backfill should be added gradually whilst ensuring the subject tree is held upright. At each stage the fill should be firmed in to eliminate all air pockets under and around the root system, but with care being taken not to excessively compact the soil.

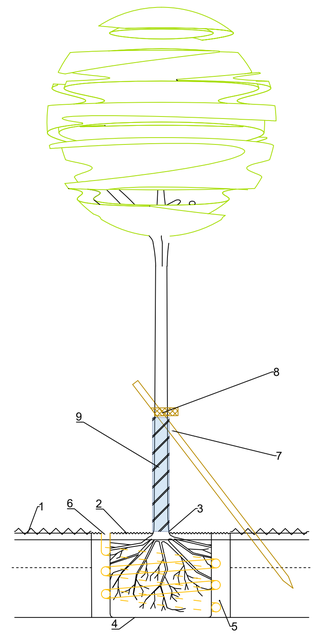
The final layer of backfilling should not be consolidated, but should be of a sufficient depth to allow for settlement and mulching.

Immediately after planting, the tree pit should be saturated to field capacity.

At this point the tree and shrub shelter/guard designs, shown in this document, should be used.

Tree and Shrub Planting Specification

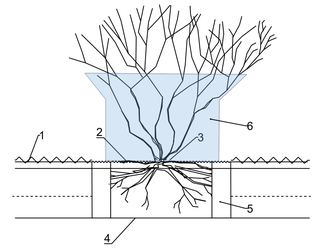
Standard Tree Pit Design:



Key

1. Existing ground level
2. Tree pit surface area as large as possible, with organic mulch layer
3. Root flare/Nursery Mark
4. Base of tree pit undisturbed unless drainage problems are apparent
5. Backfill replicating existing topsoil/subsoil profile.
6. Irrigation pipe
7. Single stake system (no higher than one third tree height)
8. Tree block and tie as agreed with client
9. Plastic spiral tree guard

Shrub Pit Design:



Key

1. Existing ground level
2. Tree pit surface area as large as possible, with organic mulch layer
3. Root flare/Nursery Mark
4. Base of tree pit undisturbed unless drainage problems are apparent
5. Backfill replicating existing topsoil/subsoil profile.
6. Plastic strimmer guard



SCHWEGLER 1B BIRD NESTING BOX



SCHWEGLER 2FN SPECIAL WOODCRETE BAT BOX

Standard (Selected) Tree Species	No.	Girth(cm)	Type	Height (cm)
Alnus glutinosa (Common Alder)	10	10-12	Containerized	200
Prunus padus (Bird Cherry)	8	10-12	Containerized	200
Quercus robur (Common Oak)	4	12-14	Containerized	200

Shrub Species	No.	Girth(cm)	Type	Height (cm)
Viburnum opulus (Guelder Rose)	31	NA	5L Pot	30-50

Topsoil Improvements and Wild Flower Meadow Planting

Applied to all newly planted areas, to manufacturers' recommendations where appropriate:

Incorporate 75mm depth of soil conditioner into topsoil during cultivation; Incorporate Enmag CRF granular fertilizer at approx 140g per pit to standard tree pit backfill and 70g per pit to structural / ornamental shrub planting;
Wildflower Seeding - the areas shown on the plan to the right are to be seeded with EM3 Special General Purpose Meadow Mixture between the newly planted trees and shrubs, with an application rate of 4g/m^2.

General Recommendations for Post-Planting Maintenance

This management programme should be in place for at least 5 years.

Irrigation/Watering
The timing and frequency of irrigation/watering should take into account the prevailing weather conditions, soil moisture release characteristics, and the response of the tree species to water deficits or periods of prolonged soil saturation.

Frequency of irrigation is more important than the volume of water given at any one time therefore regular irrigation through the initial planting period is recommended rather than one off treatments. Extra water should be considered if there are 10 consecutive days during the growing season at >25 °C.

Formative pruning

Formative pruning is only foreseen to be in the needed for crown raising to enable the tree guards (shown above) to be able to be erected around the stems of the ash saplings. Any necessary pruning should be carried out in accordance with BS3998 as required throughout the early years of a tree's life in the landscape and formative pruning should continue until a permanent structurally sound scaffold system of branches typical of the species and appropriate to the site circumstances is produced.

Routine maintenance

All guards/shrub shelter support systems are to be inspected on a bi-annual basis to assess the need for repairs, replacement or removal as is necessary, considering the growth and development of each tree and shrub.

The area around the base of the tree should be free from competing vegetation. **It is recommended that due to the situation that mulch is used to achieve this or regular hand weeding.**

All mulches should be replenished to their original depth, 50 mm to 100 mm, and hand-weeded as necessary and at least once annually. The mulched area should be enlarged, if practicable, as the tree develops to the canopy drip line, taking care to avoid a build-up of mulch around the root flare and the base of the stem.

The soil around newly planted trees should be regularly inspected for soil capping or compaction. Remedial action should be taken as necessary.

All trees should be checked on a regular basis for mammal, human and other external damage. All trees should be checked on a regular basis for pests and diseases. Remedial action should be implemented as soon as practicable following discovery.

Unless specific nutritional deficiencies are identified, no fertilizer should be applied to newly planted trees in the first season.

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Notes

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Key

- Existing Site Tree Position
- Proposed *Alnus glutinosa* Standard Tree Position
- Proposed *Prunus padus* Standard Tree Position
- Proposed *Quercus robur* Standard Tree Position
- Proposed *Viburnum opulus* Shrub Position
- Existing Maintained Grassland
- Proposed Wildflower Meadow Planting
- Proposed 1x Bat Box (Schwegler 2FN), facing south or south-west
- Proposed 1x Bird Box (Schwegler 1B), facing north or north-east
- Proposed insect hotel/tower

0m 10 20 30 40 50m
SCALE 1:500

Rev	Description	By	CB	Date
-	First issue.	ZG	TF	10.05.23

MAKING COMPLEX EASY

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Project: Redback Playing Fields
Radcliffe, Manchester, M26 4PB

Title: Biodiversity Enhancement And Planting Plan

Status	Drawn By	PM/Checked by
Planning	ZG	DC

Job Ref	Scale @ A1	Date Created
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RPS Drawing / Figure Number: 700
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