

Soft Landscape Specification and Planting Schedule v1

For Planning Purposes

Construction of a single dwelling with associated external works

2 Carn Gwilym Goch, Merthyr Tydfil

**Prepared by Mackley Davies Associates Ltd
July 2023**

1.0 PLANNING BACKGROUND

1.1 This Plan is provided to meet Condition 9 of approved planning application P/21/0388 to Merthyr Tydfil County Borough Council for construction of one self-build dwelling with associated external works at 2 Carn Gwilym Goch, Merthyr.

9 No development or site clearance shall take place until there has been submitted to and approved in writing by the Local Planning Authority a scheme of landscaping. The scheme shall include indications of all existing trees (including spread and species) and hedgerows on the land, identify those to be retained and set out measures for their protection throughout the course of development.

2.0 OUTLINE SPECIFICATION FOR SOFT LANDSCAPE WORKS

Refer to Planting Plan reference: 23/934/01.

Refer to the Landscape and Ecological Management Plan (LEMP).

1.0 Work to be carried out in accordance with the following standards:

- British Standards:
 - BS 3882:2015 Specification for topsoil
 - BS 8601:2013 Specification for subsoil and requirements for use
 - BS 5837:2012 Trees in relation to design, demolition and construction
 - BS 8545:2014 Trees from nursery to independence in the landscape
 - BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces)
- National Plant Specification
- National Landscape Specification (NBS) latest revision
- Landscape Architects detailed specification (to be issued at tender stage)

2.0 Protection of site trees and hedges:

Ensure protection of any hedges and trees to be retained in accordance with BS 5837:2012 Trees in relation to design, demolition and construction.

3.0 Site clearance:

Remove any bramble, rubbish, concrete, metal, glass, decayed vegetation, contaminated substrate and stones with largest dimension exceeding 100mm. Contamination includes steel, concrete, rubble, fuel, lubricants or other substances injurious to plant growth.

4.0 Soil conditions:

Do not work in waterlogged conditions, when the ground is frozen or covered by snow, or when there are pools of water on the ground surface, or following sustained heavy rainfall eg >10mm in 24 hours.

Cultivate and plant into moist friable soil.

Provide adequate additional root protection and prevent planting pit sides and bases and backfill materials from freezing.

5.0 Climatic conditions:

Carry out the work while soil and weather conditions are suitable for the relevant operations. Do not plant during periods of frost or strong winds. Bare root planting to be restricted to the 'lifting' season, generally November to March.

6.0 Machines and tools:

Use only machinery and tools suitable for the site conditions and the work to be carried out.

7.0 Excavation:

Ensure the location of all services is known before any excavation operations.

Excavation is NOT to be carried out within the root protection areas of hedges and trees to be retained.

8.0 Soils:

The following hierarchy to be followed to reduce soil handling:

1. If soils are suitable and in the right location, protect during the construction period in-situ by adequate fencing
2. Otherwise, move to the prepared receptor site
3. Otherwise, strip, store, and re-use for backfill once the receptor site is ready
4. Short fall will be made up by imported topsoil, refer to outline specification below

All in accordance with:

- BS 15176: 2019 Guidance on the characterization of excavated soil and other materials intended for reuse
- BS 3882:2015 Specification for topsoil
- BS 8601:2013 Specification for subsoil and requirements for use
- Defra Code of Practice for the Sustainable Use of Soils on Construction Sites

Subsoil:

Project Manager is to ensure subsoils under soft landscape areas are loose tipped and not firmed, consolidated, or compacted when laying. Tip and grade to approximate levels in one operation with minimum trafficking by plant. Batter/feather in local levels to achieve smooth rounded profiles and ensure falls are positive to reduce the risk of water ponding.

Topsoil should be keyed into the subsoil interface. Over-compacted subsoil should be loosened using ripping equipment before topsoiling, when soil is dry. For small areas, a small tracked excavator with a tine attachment or hand cultivation should be used. Remove surface stones larger than 75mm in preparation for cultivation, loosen thoroughly to a depth of 300 mm.

Topsoil:

IMPORTED TOPSOIL to be supplied and placed to BS3882:2015. Ideally supply and place topsoil without the need for storage. No spreading after sustained heavy rainfall over 10mm in 24 hours.

Ensure topsoil is loose tipped in layers of 0.2m maximum, and not firmed, consolidated, or compacted when laying by tipping and grading to approximate levels in one operation with minimum trafficking by plant in line with Landscape National Building Specification.

Place sufficient depth to allow for topsoil settlement. Batter/feather in local levels to achieve smooth rounded profiles and ensure falls are positive to reduce the risk of water ponding. Backfill to the following depths for subsoil (to BS8601:2013) and topsoil (to BS3882:2015):

	Subsoil depth mm	Topsoil depth mm
trees	600	300
ground cover, shrubs/hedging plants	300	300
grass	150	150

9.0 Tree Planting:

Refer to Tree Pit Section on Soft Landscape Plan 23/934/01.

Backfill mix (including green compost, fertilizer, mycorrhizal supplement) for bare root stock, to accord with recommendations of topsoil survey. Backfill mix should not be required for rootballed and container trees at planting.

Plant trees as indicated on the Soft Landscape Plan. Contractor is to locate underground services before excavation. Install a root barrier where trees will lie within 3m of an existing or proposed underground service route or highway kerb eg. Greenleaf Reroot or equivalent to full depth of topsoil to top of finished soil level with sides vertical.

Install a root barrier where trees will hedges lie adjacent to proposed aggregate filled SUDs trenches eg. Greenleaf Reroot or equivalent to full depth of topsoil to top of finished soil level with sides vertical.

10.0 Cultivation prior to planting:

If areas are weed infested, remove by hand or mechanical means or treat re-growth (during the growing season) with an approved herbicide such as Glyphosate as advised by the CA.

No cultivation to take place within hedge and tree root protection areas.

No cultivation after sustained heavy rainfall over 10mm in 24 hours.

Cultivate topsoil by hand or machine to achieve a suitable loose, friable tilth, remove rubbish/stones/roots etc over 50mm for planting areas in line with BS 3882:2015 table A.1, and rake to even out levels.

11.0 Plant Supply:

Nursery Stock to BS 3936 Part 1 'Nursery stock specification for trees and shrubs' and BS 8545:2014 Trees from nursery to independence in the landscape.

Name, forms, dimensions and other criteria as scheduled and defined in the National Plant Specification. If specified plants are unobtainable or known to be likely to be unobtainable at the time of ordering, obtain approval before making any substitution.

Plants should be:

- Materially undamaged, sturdy, healthy, vigorous, of good shape and without elongated shoots.
- Grown in suitable environment and hardened off.
- Free from pests diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants to be bottom worked unless otherwise specified or approved.
- UK grown.
- Produced in peat-free compost.

In addition, trees should have:

- Clearly defined and straight leader.
- Balanced branching framework with lateral branches subordinate to the leader.
- Clearly defined stem taper and proportionate, balanced height/stem girth ratio appropriate to the species.
- No crossing or co-dominant branches.
- Evenly spaced lateral roots with minimum four major laterals.
- Evenly spaced, well developed fibrous roots.
- An intact root-ball with the root-flare clearly visible.

12.0 Plant Handling:

Handling of plants to HTA National Plant Specification and the Committee for Plant Handling and Establishment Part 3 'Recommendations for Plant Handling from Delivery to Successful Establishment' and BS 8545:2014 Trees from nursery to independence in the landscape.

All plants delivered on racks. Boxed/pallet stacked plants are not acceptable.

Protect plants / trees from frost and from drying out.

Handle plants / trees with care. Protect from mechanical damage and do not subject to shock eg. by dropping from a vehicle.

All plant material is to be carefully lifted, adequately and carefully packed and protected for delivery to site. Plants should not be lifted and stored on the delivery vehicle overnight. Ideally plants should be lifted, delivered to the site and planted on the same day.

On delivery to site, bare-root or root-balled plants, should be stacked together, away from the effects of the drying winds, their roots being covered with sand or fine soil and watered to prevent drying out.

Plants may require to be heeled-in, using prepared trenches, covered with soil (fine material) and watered thoroughly. Stored plants should be checked regularly to ensure their root systems are fully covered and that the soil (fine material) is kept moist.

If planting becomes delayed into April or later, then bare root plant material is to be stored in cold stores until required on site.

13.0 Planting:

Set out plants evenly to density and quantities shown, arranged to avoid straight lines and geometric patterns. Plant to the nursery soil depth, face up to present best side, and firm in.

For bare root stock, dip in a proprietary alginate prior to planting such as Alginure/Broadleaf P4 anti-desiccant gel before planting.

For rootballed, containerizing and container grown trees:

Dig a hole that is widest at the top with gently sloping, scarified sides to comfortably accommodate the width, but of no greater depth than the roots or root-ball. For root-balled trees the hole may be slightly shallower than the rootball (approximately 2.5-5cm), in anticipation of soil settlement. For container grown trees the hole may need to be 4-6cm shallower. Do not mix the excavated soil.

Water the root system prior to planting.

Diameter of pit to be minimum 75mm greater than the root system. Plant at correct depth with root flare visible at ground level, allowing for topsoil settlement. Backfill in 150-200mm layers, firm to eliminate voids. Final backfill layer is not consolidated. Remove wire baskets, hessian and twine used in the rootballing process where this is feasible without disturbing the root ball. Immediately water to field capacity, add mulch but not at root flare to a 1.2m radius or 3m radius for large trees where possible. No fertilizer to be added in the first season.

14.0 Immediate aftercare:

Immediately after planting cut back any damaged, dead or diseased branches and remove any weak, thin or malformed growth.

For tree species any immediate aftercare is to accord with BS3998:2010 and BS 8545:2014.

If tree leaders are damaged or have been removed, the stock should be replaced.

Water as necessary to ensure the establishment and continued thriving of all planting. Ensure the full depth of topsoil is thoroughly wetted. Use a fine rose where appropriate to avoid damaging or loosening plants.

For trees planted into tree pits, wet the root system before planting and saturate the tree pit after planting to field capacity. Allow for watering every week to every fortnight according to weather conditions, from April to October. Where tree irrigation is provided, water through the cap and also use overhead watering for roots above the irrigation system – allow 20L for all trees.

Add mulch after watering in.

15.0 Tree staking:

The site is exposed and elevated. Secure trees using three untreated wooden stakes driven well into the ground vertically, equally spaced around the root system, with biodegradable fabric ties and pads, set low on the stem (max 1/3rd tree height).

16.0 Mulch specification:

Supplier to be agreed. Generally an amenity grade is required. Spread evenly to a depth of 50mm, increasing to 75mm around trees.

17.0 Species Rich Seeding:

Carry out the work while soil and weather conditions are suitable. Ideally carry out seeding during April-May or September. Cultivate and rake removing stones over 20mm and perennial weeds and to create smooth profile with existing levels ensuring areas are 25mm settled depth higher than adjacent hard surfaces to allow for easy grass cutting and 150mm below DPC of adjoining buildings.

Spread seed evenly at the specified rate(s) applied in two equal sowings in transverse directions. Lightly harrow or rake, roll and cross-roll after seeding using a lightweight roller. Stone and earth clod removal to 10mm size.

Seed mix to be:

- Germinal WFG20 Eco Species Rich Lawn (or equivalent if there are supply issues), sown at 10g/sqm to achieve a close mown grass sward in line with advice from the supplier. A pre-seeding fertilizer should not be applied (in line with manufacturers recommendations for EL1) OR alternative seed mix as advised by Ecologist.

18.0 Native Species Seeding:

Carry out the work while soil and weather conditions are suitable. Ideally carry out seeding during April-May or September. For all areas be aware of tree protection areas where cultivation by hand is required. Lightly cultivate, removing stones over 20mm and perennial weeds to ensure good contact between seed and soil. Mix seed with sand to ensure an even sowing rate. Lightly rake or trample down after seeding to ensure good contact with topsoil.

- Seed mix under new hedgerows to be: Emorsgate EH1 Hedgerow Mix (or equivalent if there are supply issues) sown at 4g per sqm. A pre-seeding fertilizer should not be applied (in line with manufacturers recommendations for EH1) OR alternative as advised by Ecologist.
- Seed mix to SINC buffer zone to be: Emorsgate EM3 Special General Purpose Meadow Mixture to include Devils bit scabious sown at 4g per sqm. A pre-seeding fertilizer should not be applied (in line with manufacturers recommendations for EH1) OR alternative as advised by Ecologist.

19.0 Immediate aftercare:

Immediately after planting cut back any damaged, dead or diseased, weak, thin or malformed growth.

Water as necessary to ensure the establishment and continued thriving of all planting. Ensure the full depth of topsoil is thoroughly wetted. Use a fine rose where appropriate to avoid damaging or loosening plants.

3.0 PLANTING SCHEDULE

Refer to Planting Plan 23/934/01 for layout and detail of tree pits and hedge planting.

Tree species	Height (mm)	Description	Spacing	Total (no.)
See plan for tree pit detail. Secured with a triple stake and biodegradable pad and belting. Good branching rather than height is key. 75mm mulch to 1.2 sqm.				
Sorbus aucuparia (rowan)	14-16cmg	Bare root or container or root balled	As per plan	2
Prunus padus (bird cherry)	14-16cmg	Bare root or container or root balled	As per plan	1
Prunus avium (wild cherry)	14-16cmg	Bare root or container or root balled	As per plan	1

Native Mixed hedge – 43 linm Plant a staggered row [450mm between rows, 400mm along rows] at 5 plants/lin m , bare root transplants 1+2, 900-1200mm, 3L for Holly. Mulch hedge width to 50mm depth. Maintained on a 3 year rotational cut of top and sides in February before bird nesting to provide source of nuts and berries, generally to around 1.8m, lower height of 1.2m and more regular cutting at access road frontage.					
Hawthorn [Crataegus monogyna] 40%					95
Holly [Ilex aquifolium] 10%				3L	20
Hazel [Corylus avellana] 20%					40
Cornus sanguinea [Dogwood] 20%					40
Ligustrum vulgare [Privet] 10%					20

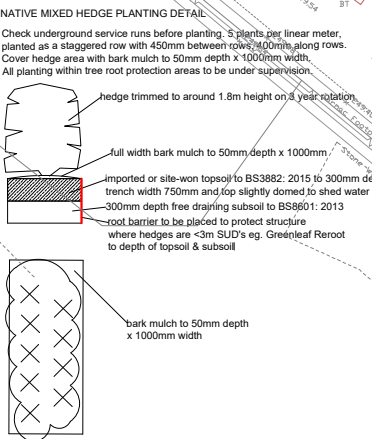
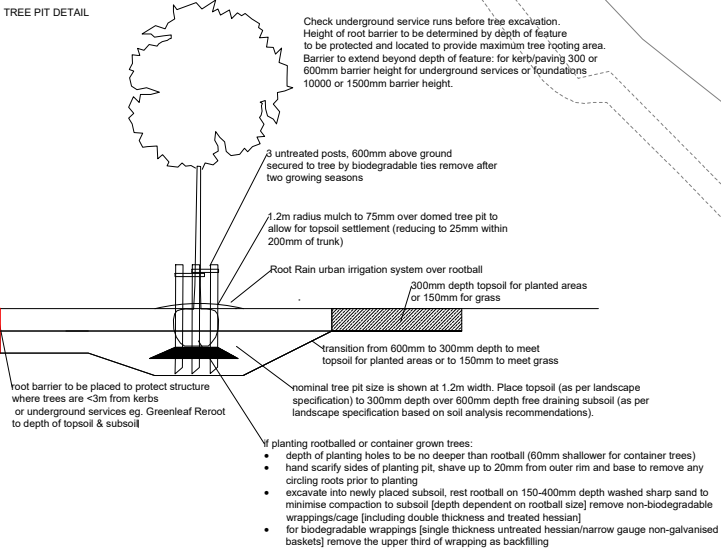


Notes

- proposed standard native trees planting 14-16cmg
- proposed native hedge planting underseeded with eg Emorsgate EH1 Hedgerow mix at 4g/sqm or similar
- proposed Emorsgate species rich seed mixes at 4g/sqm as shown
- trees and hedges within the site to be retained
- trees and hedges to be removed

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All dimensions must be checked on site and not scaled from this drawing.

This drawing is for the purposes of PLANNING. Based on Ordnance Survey and topographic survey data as supplied. OS Licence 100043966

Layout based on site layout by Utopia Design.

Refer to Mackley Davies Soft Landscape Outline specification and planting schedule.

Refer to Mackley Davies LEMP for soft landscape maintenance/management.

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2 Carn Gwilym Goch, Merthyr

CLIENT
Alan James

DRAWING TITLE
Planting Plan

SCALE	1:200 @ A1	Job No.	23/934/01
DATE	July 2023	REVISION No.	